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TWENTY-NINTH REPORT

OF THE

STATE BOARD OF HEALTH OF WISCONSIN

FOR THE

Term Ending June 30, 1922

WITH

Report of the State Bureau of Vital Statistics for the Calendar Years of 1920 and 1921

C. A. HARPER, M. D.
State Health Officer

MADISON, WISCONSIN
1922

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1922

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LETTER OF TRANSMITTAL

Madison, Wis., September, 1922.

To His Excellency, JOHN J. BLAINE,
Governor of the State of Wisconsin.

Sir: In compliance with the law, the twenty-ninth report of the State Board of Health is herewith submitted, the same being for the biennial period ending June 30, 1922.

Respectfully submitted,

C. A. HARPER, M. D.
State Health Officer.

STATE HEALTH OFFICER'S REPORT

To the State Board of Health:

Gentlemen: I have the honor to submit to you the following report for the biennial period ending June 30, 1922.

Regular Semiannual Meeting June 29, 1920.

Under the subject of new business the board first considered the adoption of a state-wide code for the location, installation and operation of chemical and dry closets. The code was adopted upon the motion of Dr. Fiedler which was seconded by Dr. Windesheim and carried.

GENERAL REQUIREMENTS FOR CHEMICAL AND DRY CLOSETS

Section 1. **Legal Effects.** Rules and regulations herein presented, and known as Chemical and Dry Closet requirements for school buildings, were adopted by the Wisconsin State Board of Health on June 29th, 1920, and published in the official state paper on July 19, 1920. Under the provisions of Section 1407a—6 of the Statutes, these rules and regulations have the force and effect of law.

Section 2. **Right to Amend or Modify Reserved.** The State Board of Health, in accordance with the law, reserves the right to repeal, amend or modify these rules and regulations should experience demonstrate that to do so is necessary for proper sanitation.

CHEMICAL CLOSETS

Section 3. **Application. Plans and Permission to Install.** (a) Before any type of chemical closet is installed in any school building the school board of that district or its legal representative shall make application to the State Board of Health, on a form furnished by or approved by said board, for permission to install such toilet, giving the size and description of the school building and other existing conditions affecting the installation, also the source and type of water supply or lack of such supply, the character of the soil, the lay of the land, and the type of chemical closet to be installed.

(B) The plans and specifications of the building and of the chemical closet system so submitted for approval shall be sufficiently detailed, cross-sectioned, etc., to enable the department to pass on the various essentials outlined herein and on items 1 to 9, inclusive, of the application blank. (Fig. 1).

Note: Order 5008 of the State Building Code requires that two complete sets of plans and specifications for new building be submitted to the Industrial Commission for approval. Plans so submitted will be referred by that department to the State Board of Health for approval of toilet requirements.

(C) Under the law the State Board of Health reserves the right to reject any and all types of closets and may prohibit the installation

of any such closet when in its judgment such prohibition is wise, and in giving permission for the installation of chemical toilets the State Board of Health does not assume responsibility for the satisfactory operation of the installation, in whole or in part, but reserves the right to order its removal should conditions dangerous to health or otherwise objectionable arise therefrom.

Section 4. **Design, Materials, Construction.** (A) The bowl must be of good grade vitreous china, or such other material as may hereafter be approved, plain and sanitary, with connection to vent pipe at the top, equipped with a good grade self-closing seat and cover, so constructed as to insure sanitary operation and durability.

(B) The Urinal Bowl. The urinal must be of good grade vitreous china or such other material as may hereafter be approved, and of such design and construction that it can be kept clean. The top shall be equipped with a suitable vent pipe connection. The cover must be self-closing, constructed of suitable light weight material that will withstand the action of urine and can be kept clean. It shall be attached to the bowl by means of a substantial hinge and equipped with an adequate foot or hand-operating device so designed as to make for easy operation and proper sanitation.

Section 5. **Connecting Tube.** (A) The connecting tube between the bowl and tank must be made of the best available material to withstand corrosion and effect of urine, such as high grade iron coated with lasting, noncorrosive, nonabsorbent material, lead or copper of adequate weight, or other approved material.

(B) The tube must be free from offsets and extend into the tank a sufficient distance so as to prevent urine from coming in contact with the upper walls of the tank. See sub-section (D) of section 7.

(C) The tank tube for closet bowls must not be less than 11 inches and for urinal of the pedestal type not less than 6 inches, inside diameter, and the joints between the bowl and tube and tank and tube shall be made as described in Sections 8 (A) and 9 (D).

Section 6. **Ventilating Pipes.** (A) Ventilating pipes must be of substantial material, properly jointed, and of a quality capable of withstanding the action of moisture and gases, and so designed and arranged as to give proper ventilation regardless of atmospheric conditions. The minimum diameter of the vent pipe to be used on single bowls is four inches and on urinals three inches. Pipes must be correspondingly larger as bowls and urinals are added for multiple installations (See section 8 F).

(B) In placing pipes, right-angled turns must not be used, and an angle not exceeding 45 degrees is to be worked to whenever possible. Horizontal runs or square pipes are prohibited.

(C) All ventilating pipes must run inside of the building and emerge at the ridge of the roof. If impossible to emerge at the ridge or in close proximity to it, then the vent pipe shall extend through the roof to a point above the roof so as to obtain unobstructed draft, and the part so exposed shall be amply protected against frost. The roof terminal of all such vent pipes shall be surmounted with a suitable ventilator so as to insure effective ventilation at all times. Ventilation direct into the smoke flue of a chimney is prohibited.

Section 7. **Tank.** The tank must be cylindrical or half-round and be made of so-called pure iron or copper bearing steel, of the best grade, equal to that made by the leading manufacturers, and must not be less than fourteen-gauge thickness, or of such material as may be hereafter approved, and equipped with:

(A) Joints substantially welded or made equally durable by some other approved method. All connection joints below the top of the tank subject to liquids must be of such design, material, and construction that they will provide for a proper water-tight joint.

(B) An agitator of substantial construction, so designed and installed that it can, under all conditions, be easily operated and kept clean, and so that it will effectually mix the tank contents.

(C) Suitable openings properly spaced with relation to fixtures tributary to bowls and spaced not less than thirty inches from center to center.

(D) Waste inlets extending into the tank from one to two inches so as to convey urine direct to the solution in the tank.

(E) Each tank must be covered on the outside at the factory, or on the premises, with one or more coats of effective rust- and corrosion-resisting covering to secure thorough protection, and the shipment shall also contain a sufficient supply of coating which shall be applied at the time of installation so as to cover all abrasions that may have from any cause taken place.

Note: The exterior of unexposed tanks may further be protected by two or more coats of burlap, each laid in hot tar or asphaltum, or some other efficient water-proof compound.

(F) The operating capacity of the tank shall in all cases be based upon the seating capacity of the school, and no such tank shall have a capacity of less than 10 gallons per pupil. One tank of 200 gallons capacity shall be installed for every 20 females or fraction and one tank of like capacity for every 20 males or fraction. All such tanks shall be increased [in the ratio of 10 gallons for each additional 15 sq. ft. of classroom floor area], equivalent to a ratio of 200 gallons for each additional 20 females or males, or fraction, tributary thereto, in accordance with the following table:

School Seating Capacity	Floor Area of Classroom in Square feet	No. of Tanks	Minimum Capacity of Each Tank
40	600	2	200 gallons
80	1200	2	400 gallons
120	1800	2	600 gallons
24	360	2	120 gallons
30	450	2	150 gallons

Exception: Existing schools actually having a seating capacity of less than 40 pupils may install smaller capacity tanks, but no such smaller tanks shall have a capacity of less than 125 gallons, or less than ten gallons per pupil, tributary, (based upon the seating capacity of the school in accordance with the above table); and no such tank shall be equipped with more than one bowl for females and one bowl and urinal for males, and all such tanks shall be so installed that they can conveniently be drained of their contents and recharged.

Note: The above requirements are based upon the following:
1. That the attendance of the different sexs be equally divided.
2. That a nine-months school period is maintained.
3. That the school may be used for community or civic meetings, etc.
4. That deposits per child and other liquids, such as chemical and bowl washings tributary to the tank, shall equal not more than 10 gallons per child for the period stated in (2). For number of bowls and urinals see Section 8 (K).

Note: It is recommended that there be one bowl and one urinal for each 15 males and two bowls for each 15 females. Tank capacity must be provided in accordance with Section 7 (F).

Section 8. **State Building Code Installation Requirements.** (A) In addition to the requirements above prescribed, installations hereafter constructed, whether of the inside or outside type, shall conform in every respect as to "housing," number of toilets required, design, standards of construction, materials, ventilation, light, location, maintenance, etc., with the minimum standards of the Industrial Commission's Building Code and the State Board of Health's codes (Orders 2202, 2204, 2205, 2208, 5253, 5256, 5257, 5259, and 5618 as modified and set forth in the following): (Figs. 1 and 2).

(B) Order 2202. **Sex Designated.** Each toilet room shall be distinctly marked with regard to the sex which uses it and no person shall be allowed to use a toilet room assigned to the other sex.

(C) Order 2204. **Cleanliness.** Every toilet room and every part thereof, including walls, floors and ceiling, and all fixtures therein, must be kept clean, efficient and in good repair.

(D) Order 2205. **Indecent Pictures.** Indecent or suggestive marks, pictures ar words are forbidden in toilet rooms, and such defacements when found must be at once removed.

(E) Order 2208. **Artificial Light.** Every toilet room shall be artificially lighted during the entire period that the building is occupied, wherever and whenever adequate natural light is not available, so that all parts of the room are adequately lighted.

(F) Order 5253. **Location, Light, Ventilation.** Every toilet room within a school building shall be completely enclosed, so arranged as to insure privacy, and so located as to be open to the outside light and air by windows or skylight openings directly upon a street, alley, court, or vacant ground space. The windows shall be so constructed that they can be opened and shall be provided with screens. The glass area for a toilet room containing one closet or urinal shall be at least four square feet, with two square feet additional for each additional closet or urinal.

Ventilation of the room shall be accomplished by extending adequate vents from the fixtures (bowl or urinal) or by some other approved method and in such a manner that offensive odors will not prevail at any time. The main vent pipe shall be not less than the following diameter:

1 fixture	4 inch pipe
2 fixtures	6 inch pipe
3 to 5 fixtures	8 inch pipe

Where the metal vent pipe extends above the roof a double pipe or other equally effective insulation against cold is recommended, and where subject to frost conditions may be required. (See section 6—C).

(G) Order 5256. **Size.** Every such toilet room shall have at least 10 square feet of floor area, and at least 100 cubic feet of air space for each bowl and each urinal, and in addition an anteroom of such size and arrangement as to serve the purpose for which it is intended shall be provided. All such anterooms shall be properly lighted, ventilated and constructed.

(H) Order 5257. **Floor.** The floor and base of every toilet room shall be constructed of material, other than wood, which does not readily absorb moisture and which can be easily cleaned, except that in existing one-room buildings where there is an existing wood floor in good condition, it may be used if permitted in writing, and provided further that the bowl or bowls as located on the first floor are set on an adequate, approved metal floor plate and that no wall type urinal is installed.

(I) Order 5258. **Walls and Ceilings.** The walls and ceilings of every toilet room shall be completely covered with smooth cement

or gypsum plaster, glazed brick or tile, galvanized or enameled metal, or other smooth, non-absorbent material. Wood may be used if well covered with two coats of body paint and one coat of enamel paint or spar varnish. But wood shall not be used for partitions between toilet rooms separating the sexes, nor for partitions which separate toilet rooms from any room used by the opposite sex. All such partitions shall be as nearly sound-proof as possible.

Note: Walls and partitions should be of light color to increase illumination and facilitate cleaning. This will also promote general deportment, cleanliness and sanitation.

(J) Order 5259. **Partitions Between Fixtures. (New Installations).** Adjoining closets shall be separated by partitions. Each individual urinal or urinal trough shall be provided with a partition at each end and at the back to give privacy. Where individual urinals are arranged in batteries, a partition shall be placed at each end and at the back of the battery. A space of six to twelve inches shall be left between the floor and the bottom of each such closet or urinal partition. The top of the partitions shall be from five and one-half to seven feet above the floor. Doors, of the same height as required for partitions, shall be provided for closet apartments used by females. Doors from three to four feet high with the bottom of the door 8 to 10 inches above the floor, shall be provided for closet compartments used by males. All partitions and doors shall be of material and finish required by Section 8 (I), Order 5258, for walls and ceilings.

Note: Wood is not recommended. If used, it should be hardwood or equal grade, and kept well covered.

(K) Order 5618. **Entrances, Doors, Number of Bowls Required.** School buildings equipped with chemical closet facilities located within or outside the building shall be provided with one bowl for every 20 females or fraction thereof, and with two bowls for every 20 males or fraction, one of which is to be installed so as to serve as a urinal. These toilet accommodations for females and males shall be placed in separate rooms or buildings with doors not less than 20 feet apart and so that privacy, comfort and sanitation are insured. Entrances shall be properly screened and shall be equipped with doors provided with a reliable self-closing device.

Section 9. **Requirements for Installation of System.** (A) The materials used on the various units, bowl, urinal, tank, seats, vents, agitator, tube, roof terminal, dry well, etc., comprising the chemical closet, shall be of proper design and construction, and so installed that the highest degree of efficiency possible is obtained.

(B) The distance between the top of tank and bottom of bowl shall be not less than sixteen inches nor more than forty-eight inches.

(C) The opening for the clean-out and for the manhole shall be so placed as to be readily accessible.

(D) All joints subject to liquid action below the top of the bowl or urinal leading to and from the tank, including manholes located inside the building, shall be so made as to convey all deposits without leaks to the tank proper.

(E) The installation shall be so made as to insure ample protection against frost for the tank and other parts that may be affected.

Note: Experience has demonstrated that chemical closet systems installed within a building must be housed with due regard to proper location, approaches, light, ventilation, care, drainage, etc. They should therefore be located preferably on the ground floor. If located in the basement the above factors must be taken carefully into account. A suitable intervening "ante-room" or its equivalent, properly lighted and ventilated by means of windows or vent pipe, must also be provided.

Section 10. **Tank Contents Disposal.** The tank shall be provided with an efficient method of draining or removing tank contents, which shall be accomplished in a satisfactory manner by one of the following methods:

(A) By means of an adequate dry well or leaching basin, properly located, consisting of an underground chamber provided with a suitable manhole and cover. Capacity of the dry well shall be at least twice that of the tank, and larger where soil conditions require it. (Figs. 2 and 3).

(B) By means of a tile absorption trench of combined strainer and absorption type, properly located, designed and constructed. The cubic contents capacity of the tile shall be at least twice the volume to be discharged. (Figs. 4 or 5).

(C) By pumping or dipping and hauling away.

Note: Experience has shown process (C) to be impractical and unsatisfactory, from the standpoint of service and sanitation, except under certain favorable conditions.

(D) The important requirements which must be taken into consideration are the lay of the land, character of the soil, amount and character of the liquid to be disposed of, location with respect to wells or other sources of water supply, etc.

Section 11. **Outlet of Tank.** The cleanout opening to the tank shall be so located, and where practical the tank so encased or exposed that access to it for inspection purposes may be readily possible. When the cleanout is placed outside of the building, it must have a suitable concrete manhole and cover. When it is proposed to remove the tank contents by pumping or dipping, the tank cleanout shall not be placed within the building.

The outlet valve shall be not less than three inches in diameter. The outlet pipe leading from the drain valve to the point of disposal shall be not less than four inches in diameter, laid direct, free from defects and with a grade not less than one-half inch per foot, and greater where practicable.

Section 12. **Chemical.** The chemical used shall be a dry chemical of standard commercial quality with a phenol coefficient of at least 15, and a minimum of 25 pounds of chemical of this standard per bowl shall be used. The phenol coefficient of the chemical shall be clearly stated on the package or container. Full directions for using the chemical shall be furnished with each package or container. The chemical solution so used shall at all times be maintained at such strength as to effectively sterilize and deodorize the tank contents.

Section 13. **Service and Guarantee.** (A) Each manufacturer shall guarantee his equipment against defects in material and workmanship and that it will operate effectively where installed and used in accordance with the printed directions furnished at the time of installation and at any later time upon request.

(B) The manufacturer is to be notified of defects, if any exist, and be given opportunity to make them good without charge to the purchaser.

(C) In case difficulty arises which is clearly due to the fault of the purchaser in operating, he shall be chargeable for service at the regular rates of the company employed to render the same.

Section 14. **Maintenance.** (A) The toilet conveniences must not be used without the tank being charged with chemical substances of proper quality and quantity.

(B) The tank must be completely emptied before each charge of chemicals.

(C) Each charge must consist of at least 40 pounds of approved chemical, as described in the specifications, to each 200 gallons capacity or approximation thereof.

(D) Before placing the chemical in the tank, it must be completely dissolved in accordance with the manufacturer's instruction therefor.

(E) The agitator must be effectively worked after each use of the closet.

(F) The tank or any part thereof subject to frost must be properly protected and must not be allowed to become so full as to permit the contents to rise into the tube connecting the bowl and the tank.

(G) The inside of the bowl must be washed frequently and at regular intervals, and be kept at all times free from fecal matter in accordance with the requirements prescribed by the manufacturer and rules governing.

(H) The installation, including all parts of the room, shall be maintained in a sanitary and serviceable condition, and the materials when removed from the tank disposed of in such a manner that a nuisance or other dangerous or objectionable conditions are not created.

Caution: The chemical used for these closets is destructive to the skin and must be carefully prepared and used. In handling the dry chemical do not allow it to come in contact with the skin. It is well to tie two thicknesses of handkerchief over the nose and mouth to prevent irritation of the air passages from the caustic dust. Should any of the chemical come in contact with the skin through splashing after being dissolved, or otherwise, wash the affected parts with water and apply vinegar, lemon juice, or some other mild acid.

(I) All chemical closet installations must be provided by the school board with suitable light weight toilet paper, and school children must be instructed to use it. Teachers should see that the school board furnishes such paper for each school.

Note: Teachers should be instructed to visit the toilets frequently and to prohibit any obscene or indecent writing or print upon the walls or any part of the room or building. The state law (Section 4590 of the statutes) provides a fine of not to exceed $500 for such offense.

Note: For location and construction of outside toilets, see State Plumbing Code, issued by the State Board of Health.

The foregoing data are intended to serve as a guide for installations to be placed within or in connection with rural school buildings. They are equally applicable to other places used for human habitation, particularly homes. Certain minor modifications as to building structural features may, in some cases, be permissible where the system is housed in a detached outdoor building. It is, however, extremely important that all such installations be carefully placed, specified, installed and maintained.

Dr. I. F. Thompson appeared at the meeting upon invitation and presented the following report covering the work of the Bureau of Venereal Diseases:

I herewith submit a brief report of the work that is being carried on and the results obtained in the Bureau of Venereal Diseases during the fiscal year of 1919-1920.

There has been reported to this bureau since July 1, 1919, 2,955 cases of gonorrhea, 496 of syphilis and 81 of chancroid; a total of 3,530 cases.

Before January 1, 1920, it was our practice to send out a form letter each month to try and stimulate reporting. Since January 1 we have been unable to do this on account of the shortage of paper. We approximate 300 cases each month.

We have had reported back to us as cured 2,375 cases. This figure is worthy of notice. It shows that a large proportion of the physicians reporting are carrying out the full intent and purpose of our law. It shows that 2,375 cases of venereal diseases have been held until the physicians have satisfied themselves that the individuals are cured. It shows that there are over 2,000 people in our state who have been made to realize the seriousness of a venereal disease and the necessity of remaining under treatment until they are cured. This is an education that the persons will always remember.

During the year we have received reports from every county in the state with the exception of seven: Adams, Florence, Kewaunee, Marquette, Pepin, Richland and Waukesha.

It is our intention to make a special endeavor to interest the physicians in these counties in our work.

There are twenty-three counties from which five or less cases have been reported. There are approximately that number of counties each month from which we do not receive reports.

There are now established fourteen clinics in our state where indigent cases may receive treatment free. Seven of these are under our direct control and we have in them social workers who do the "follow-up" work in the city and vicinity. We have another worker in Milwaukee co-operating with the four clinics established there. Our clinics and workers are located at Superior, Madison, Oshkosh, Janesville, La Crosse, Green Bay and Kenosha.

Advantage was not taken of these clinics and treatments to any extent for some time. There have been given, however, 4,283 treatments to the fourteen clinics in the past year.

We are receiving approximately 300 requests each month for pamphlets; about one-half of these are received direct from people of the state and the rest are first sent to Washington and then returned to be filled. We have distributed 212,157 pamphlets on request during the year passed.

Miss Riley, Mrs. Carberry, Mr. F. D. Sherwood, Dr. Henika and myself have visited fifty-five counties. Some of them have been visited several times and covered more intensively than others.

We have put on one-day programs 109 times in cities of 10,000 or over and 242 times in cities and villages under 10,000.

There have been given 475 lectures with a total attendance of 51,450.

There have been given 323 film showings with a total attendance of 64,539. While it is our plan to show a film at each of the lectures and always to give a short talk at each film showing, they are only counted as one showing either as a lecture or as a film.

With our card exhibits "The Venereal Menace" and "Keeping Fit" shown at county fairs, state fairs and in the "Keeping Fit" campaigns

with the Y. M. C. A. and high schools of our state we have reached approximately 470,000 people.

Directly by means of lectures, films, card exhibits, and pamphlets, this bureau has come into touch with 830,746 residents of our state during the year.

Mr. Baker reported that there are now pending in the office requests for fifty-seven investigations and special surveys in connection with plans for water supplies, sewage disposal and proper handling of industrial waste. It was the opinion of the various members that requests of this kind should not be allowed to accumulate for any considerable period of time and directed that every effort be made to handle all requests for local inspections with as much despatch as possible. Necessity for spending more time in the field was discussed and the state health officer was directed to try and work out a plan for accomplishing this end. Upon the motion of Dr. Fiedler, which was seconded by Dr. Windesheim and carried, the board voted to employ one additional sanitary engineer and one assistant stenographer for the engineering division for a period of three months beginning July 1, such salaries and expenses to be paid out of the Sanitary Engineering fund.

Amendments to the camp regulations considered by the board at a previous meeting were then discussed. Dr. Fiedler moved that the following amendments to the camp rules be adopted; this motion was seconded by Dr. Harper and carried.

Regulation 2 is amended to read as follows:

Regulation 2. The term "camp" as used in these regulations shall include any lumbering, mining, railway construction or other camp where men are employed and housed in temporary quarters; such as cars, tents, buildings or other enclosures other than the bona fide homes of the employes, **but shall not include buildings used or intended to be used as "dormitories" as defined in the state building code, adopted and enforced by the Wisconsin Industrial Commission.**

Regulation 6 is amended as follows:

Regulation 6. Every **temporary** building, car, tent or other enclosure occupied as sleeping quarters by the employes engaged in any camp or works shall contain at least 225 cubic feet of air space for every occupant thereof, and shall be supplied with windows for purposes of light and ventilation, constructed to open.

Regular Annual Meeting January 26, 1921

Under the subject of new business the board first considered the situation at Green Bay relative to the control of smallpox. The weekly reports submitted by the health officer showed that smallpox has been present in the city in a threatening form for several weeks. The health officer, Dr. Gosin, in compliance with the statutory requirements, issued an order in December, 1920, prohibiting the attendance at school of teachers or pupils who had not been vaccinated. Considerable opposition to the enforcement of the state law has developed and Dr. Gosin has appealed to the State Board of Health for advice

and assistance. Assistant Attorney General Messerschmidt met with the board and advised that the statute in question is rather ambiguous but that the attorney general's office is of the opinion that the order excluding teachers and pupils from the schools who have not been vaccinated, should date from the time the first case appears. It appears from the record that Dr. Gosin, the health officer, did not issue the initial order at that time. The attorney general therefore advised that the state board of health notify the health officer of its consent to renew the exclusion order for another period of twenty-five days or so many days thereof as the State Board of Health deems necessary.

Dr. Fiedler then moved that on account of the continued presence of smallpox at Green Bay and the appearance of new cases of this disease from time to time, the State Board of Health in regular annual meeting assembled on January 26, 1921, advise, consent and urge the renewal of the order issued by the health commissioner of the city of Green Bay in compliance with the statutory provisions prohibiting the attendance at school of teachers or pupils who have not been vaccinated, for a period of twenty-five days, this renewal order to date from January 31, 1921.

Motion seconded by Dr. Hayes and carried. Quorum present.

The board then discussed the state law requiring the State Board of Health to act in permitting the extension of the twenty-five day limit provided for under section 40.71 of the statutes, and it was the unanimous opinion of all of the members present that the state health officer should be granted authority to grant these extensions whenever necessary. The following resolution was then adopted and ordered spread on the minutes of the board meeting, upon the motion of Dr. Fiedler which was seconded by Dr. Windesheim and carried.

Whereas, Under the authority granted by section 1407*a*—6—1 of the statutes, authorizing the State Board of Health, in its discretion, to empower the state health officer to act for the board upon such matters as it may determine in issuing and enforcing orders in compliance with the public health laws and the rules and regulation adopted by the board, and

Whereas, It is often necessary in complying with the provisions of subsection 2 of section 40.71 of the statutes, relating to the control of smallpox, that prompt action be taken to secure a reasonable compliance with these requirements.

Therefore, be it resolved, by the State Board of Health in regular annual meeting assembled, at the office of the board in the city of Madison, on January 26, 1921, that the state health officer is hereby authorized and directed to act as and for the board in extending the twenty-five day limit provided for under section 40.71 of the statutes.

The legislative committee of the Wisconsin Funeral Directors' and Embalmers' Association requested a hearing before the board on the subject of new legislation. The following members of the committee appeared: Messrs. Morris, Fiss, Ragan, Frautschi and Brett. The committee recommended the adoption of certain provisions in the Texas law, which requires all licensed embalmers and undertakers to

attend a course of lectures to be arranged for by the State Board of Health at least once every three years, under penalty of revocation of license.

The committee also advised that the present law be amended to prohibit any unlicensed person from acting as a funeral director and to provide for the registration of student embalmers.

Dr. Harper moved that the board accept the recommendations of the legislative committee, with the proviso that the attorney general be asked to pass upon the question of whether this program, or any part of it, can be put through by the action of this board in its rules and regulations, and if the attorney general holds that this cannot be done, that the legislative committee be notified and legislative action considered.

Motion seconded by Dr. Hayes and carried.

The state health officer then advised the members that on account of a political controversy, it has been impossible for the mayor to nominate a health officer for the city of Princeton which will be confirmed by the common council, as the law requires. Subject to the approval of the board, therefore, and acting under the provisions of the state law, Dr. Fortner of Princeton was selected as the health officer. The action of the state health officer in making this appointment was approved by the board upon the motion of Dr. Sutherland, which was seconded by Dr. Fiedler, and carried.

The board next considered the desirability of authorizing the state health officer to make such appointments of local health officers when the State Board of Health is not in session. After a full discussion it was moved by Dr. Hayes, seconded by Dr. Fiedler, and carried, that the following resolution relating to this subject be adopted and spread upon the minutes of the board meeting:

Whereas, Under the authority granted by section 1407*a*—6—1 of the statutes, authorizing the State Board of Health in its discretion, to empower the state health officer to act for the board upon such matters as it may determine in issuing and enforcing orders in compliance with the public health laws and the rules and regulations adopted by the board, and

Whereas, It is necessary at times in complying with the provisions of subsection 2 of section 1411 of the statutes, relating to the appointments of local health officers in case the town board, village board or common council neglects or refuses to make such appointment, that prompt action be taken in order to give the local health administration a legal status,

Therefore, be it resolved by the State Board of Health in regular annual meeting assembled at the offices of the board in the city of Madison on January 26, 1921, that the state health officer is thereby authorized and directed to act as and for the board in appointing local health officers in compliance with the provisions of subsection 2 of section 1411 of the statutes.

The smallpox situation in the state was fully discussed and it was the opinion of all the members present that the present rules relat-

ing to the prevention and control of smallpox are unsatisfactory and should be amended. The members agreed that the patient who has smallpox should be quarantined as is now done, but that the other members of the family should be permitted to go to and come from the quarantined home at any time if they submit to vaccination, regardless of whether they have recently been successfully vaccinated or not. Dr. Harper moved the adoption and publication of the following rule for the prevention and control of smallpox. Dr. Sutherland seconded the motion which was carried:

The rule for the quarantine and control of smallpox is amended to read as follows:

SMALLPOX

For The Patient

Quarantine until after all crusts or scales have fallen off or been removed, and the disinfection of the patient and premises.

For Exposed Persons

Quarantine for fourteen days from date of last exposure unless the exposed person submits to immediate vaccination.

Adopted by the State Board of Health on January 26, 1921. Published in the official state paper on February 5, 1921. Published by order of the board.

The question of terminal fumigation after death or recovery from a dangerous communicable disease was next taken up and fully discussed. It was the unanimous opinion of all the members present that fumigation as it is generally done has very little, if any, value for the following reasons:

1. The quality and quantity of the gas to be liberated is often below standard and has no germicidal value.
2. The rapidity with which the gas is liberated is the test of its effectiveness. The gas is frequently liberated too slowly.
3. The temperature of the room is also not properly regulated, neither is sufficient moisture often provided.
4. Many homes are so constructed that they cannot be properly fumigated.
5. If concurrent disinfection is properly carried out during the time of the illness, it is now quite generally agreed that aerial fumigation is not necessary.
6. The expense to the various towns, villages and cities for the purchase of fumigators is an important item and it is the opinion of the board that this money could be spent in other ways to better advantage from a health standpoint.

Dr. Fiedler therefore moved that the provisions of Rule 7, relating to disinfection, be amended as follows:

DISINFECTION

Rule Seven, relating to disinfection after death or recovery from a dangerous communicable disease, is amended to read:

Rule 7. **Disinfection.** Any house or building and its contents in which a case of cholera, chickenpox, diphtheria, influenza, measles,

cerebrospinal meningitis, plague, poliomyelitis, rubella, scarlet fever, smallpox, tuberculosis, typhoid fever, typhus fever or whooping cough has occurred shall be disinfected under the immediate supervision and direction of the local board of health or its proper officer in the manner required by the State Board of Health.

Terminal Disinfection by Chemical Means is defined to be the washing of all woodwork, doors, casings, ledges, floors, furniture, and other articles which may be infected, with a proper solution of bichloride of mercury, carbolic acid, lysol or other approved disinfectant, containing on the package or container the phenol-coefficient as determined by the Hygienic Laboratory, United States Public Health Service, Washington, D. C.

Terminal Disinfection by Physical Means is defined to be the washing of all surfaces and articles which may be infected with soap and water, or lye and water, applied thoroughly with a scrub brush or wash cloth.

Concurrent Disinfection is defined as the application of disinfection immediately to the discharges from the body of an infected person and to soiled articles.

Cleaning signifies the removal by scrubbing and washing of organic matter on which and in which bacteria may find favorable conditions for prolonging life and virulence.

Isolation is defined to be the separating of persons suffering from a communicable disease, or carriers of the infecting organism or agencies from other persons in such places and under such conditions as will prevent the direct or indirect conveyance of the infectious agent to susceptible persons.

Disinfection of Excreta. When required by these rules, all excreta leaving the patient in the discharges from the body must be disinfected at once, using six ounces of lysol to one gallon of water; six ounces of carbolic acid to the gallon of water; the milk of lime (water from freshly slaked lime) using eight parts of water to one part of lime; chloride of lime used as a powder with equal parts of excreta, or other approved disinfectant. The material to be disinfected should be left in vessel with disinfecting solution for at least one hour before emptying. Flies should never be allowed to come in contact with excreta of any kind.

The clothing, bed linen, any any materials which have in any way come in contact with the patient must be thoroughly disinfected either by boiling or immersing in an approved disinfecting solution.

The Hygienic Laboratory method of determining the phenol-coefficient of disinfectants is hereby adopted as the standard for all disinfecting preparations sold in Wisconsin and all manufacturers or distributors offering disinfectants for sale in Wisconsin shall state on the label of each package the phenol-coefficient as determined by the Hygienic Laboratory of the United States Public Health Service.

Approved Disinfectants for Washing and Cleaning. Bichloride of mercury, one dram (one-eighth ounce) to a gallon of water; carbolic acid, two ounces to a gallon of water; formaldehyde, three ounces to a gallon of water; lysol, two ounces to a gallon of water; Bacilli-Kill, used as directed; or other approved disinfectant. Strong soap suds and water, or lye and water, if applied to all surfaces and articles which may be infected, can be used instead of chemicals but the work must be thoroughly done under the direct supervision of the health officer or a representative of the health board.

Sulphur can not be used for disinfecting purposes after death or recovery from a dangerous communicable disease.

After death or recovery from the following dangerous communicable diseases and before the quarantine sign or placard is removed, the following regulations governing disinfection must be complied with:

Cholera

Prompt and thorough disinfection of the stools and vomited matter. Articles used by and in connection with the patient must be disinfected before removal from the room. Food left by the patient should be burned.

The bodies of those dying from cholera should be cremated or wrapped in a sheet wet with a strong disinfectant solution and placed in a water-tight casket. The room in which a sick patient was isolated should be thoroughly cleaned and disinfected.

Chickenpox

Concurrent disinfection of articles soiled by discharges from lesions. Thorough cleaning of premises before placard is removed.

Diphtheria

Concurrent disinfection of all articles which have been in contact with the patient and all articles soiled by discharges from the patient.

Terminal disinfection by chemical means and thorough cleaning of premises before the quarantine is removed.

Influenza

Before the placard is removed the room shall be thoroughly aired, the woodwork washed with soap and water or an approved disinfectant, and all bed clothing used by the patient shall be boiled or thoroughly cleaned and aired.

Measles

Concurrent disinfection of all articles soiled with the secretions from the nose and throat.

Thorough cleaning or disinfection of infected rooms before placard is removed.

Cerebrospinal Meningitis

Concurrent disinfection of discharges from the nose and mouth and of articles soiled therewith.

Thorough cleaning or disinfection of infected rooms before quarantine is removed.

Plague

Concurrent disinfection of all discharges and articles freshly soiled therewith.

Thorough cleaning and disinfection of infected rooms before removal of quarantine.

Poliomyelitis

Concurrent disinfection of all nose, throat and bowel discharges and all soiled clothing or bed linen.

Infected rooms must be thoroughly cleaned or disinfected before removal of quarantine.

Rubella

Concurrent disinfection of all discharges from the nose and throat and all articles soiled by such discharges.

Infected rooms must be aired and cleaned before placard is removed from house.

Scarlet Fever

Concurrent disinfection of all articles which have been in contact with a patient and all articles soiled with the discharges of the patient.

Terminal disinfection by chemical means and thorough cleaning of premises required before quarantine is removed.

Smallpox

Concurrent disinfection of all discharges and articles soiled therewith.

Thorough cleaning or disinfection of premises before quarantine is raised.

Tuberculosis

Concurrent disinfection of sputum and articles soiled with it.

Particular attention must be paid to prompt disposal or disinfection of sputum, handkerchiefs, cloths and of eating utensils used by the patient.

After the death or removal of the patient the premises should be thoroughly cleaned or disinfected.

Typhoid Fever

Concurrent disinfection of all bowel and urinary discharges and articles soiled with them.

Thorough cleaning of infected rooms before placard is removed.

Whooping Cough

Concurrent disinfection of discharges from the nose and throat of the patient and all articles soiled with such discharges.

The rooms used by the patient must be thoroughly cleaned before the placard is removed.

Adopted by the State Board of Health on January 26, 1921.
Published in the official state paper on February 5, 1921.
Published by order of the Board.

W. F. Whyte, President,
C. A. Harper, State Health Officer.

Dr. Hayes then moved that the following rules and regulations governing the safe and sanitary condition of hotels be adopted and ordered published. Motion seconded by Dr. Sutherland and carried.

RULES AND REGULATIONS OF THE STATE BOARD OF HEALTH

Under chapter 648, Laws of 1913.

Governing the Sanitary and Safety Conditions of Hotels and Restaurants in Connection Therewith in Wisconsin.

These rules and regulations were officially adopted by the Wisconsin State Board of Health on January 26, 1921, and were published in the official state paper on February 5, 1921. Such rules and regulations therefore have the full force of law.

Suggestions to Guests

These rules and regulations are designed to give you the maximum safety, comfort and health protection that a hotel will reasonably per-

mit. The management must, however, have your hearty assistance and co-operation to conduct this establishment in a satisfactory manner. You should use the property of the hotel with the same care as though it were your own. The use of washbowls in sleeping rooms for urinals; towels and bedding for shining shoes; expectorating on floors, walls or carpets; or other filthy practices should be strongly condemned by all persons who desire to improve living conditions in hotels.

Rule I. Permits

Before opening for business, every hotel owner or manager shall obtain a permit from the State Board of Health. The permit shall be renewed on or before January 1 of each year. Such permit is not transferable from one location to another or from one person to another. The hotel permit must be conspicuously displayed in each hotel. A copy of the hotel rules and regulations must be posted in a convenient place for the employes. Every hotel in this state shall be conducted in every department in a manner most conducive to the protection of the health, comfort and safety of its guests and employes, in accordance with standards prescribed by rules and regulations and orders issued in conformity to law.

Rule II. Construction and Equipment

Every hotel in this state shall be conducted in every department in a manner most conducive to health, comfort and safety of its guests, and it shall be constructed, equipped and maintained with efficient plumbing, ventilation and lighting, in accordance with standards prescribed by rules, regulations and orders issued in conformity to law.

Rule III. Lavatories and Toilets

(a) All hotels in cities, towns and villages where a system of waterworks and sewers, adjacent to the property, is maintained for public use shall be equipped with suitable lavatories and toilet facilities for the accommodation of its guests. The sewer must be connected with the public sewer system.

(b) All toilets, urinals, lavatories, bath tubs, sinks, and drains in hotels shall be installed and maintained in conformity with the State Plumbing Code, issued by the State Board of Health.

(c) Each hotel shall be provided with a public washroom, which must be supplied with clean individual towels as provided by law. The use of the common roller towel is prohibited. There shall be at least one public toilet for every fifteen sleeping rooms or fraction thereof, that are without toilets, in addition to those provided with individual toilets; except that there must be at least one toilet for each sex.

(d) Every toilet room in hotels shall be artifically lighted during the entire period that the building is occupied, wherever and whenever adequate natural light is not available, so that all parts of the room are easily visible.

Rule IV. Outside Toilets

(a) All hotels in cities, towns or villages not having a public sewer system or waterworks, shall have properly constructed privies, vaults or other sanitary devices, which shall always be kept clean, properly ventilated and well screened from insects and rodents.

(b) The wall or partition between the apartments must be tight. A separate apartment with separate entrance, properly designated and screened from public view, must be provided for each sex. All privy doors shall be self-closing.

(c) Where septic tanks are installed, they must be construted in compliance with the State Plumbing Code.

Note: For location and construction of outside toilets, see State Plumbing Code, issued by the State Board of Health.

Rule V. Kitchen

(a) Every kitchen connected with a hotel shall be properly lighted and ventilated. The ventilation must be sufficient to remove the gases and fumes from the preparation of foods.

(b) The doors, windows and any other openings in hotel kitchens must be properly screened against flies and other insects.

(c) Walls, ceilings and floor in every kitchen in connection with the hotel must be kept clean and in good condition at all times.

(d) The walls and ceiling in every kitchen, pantry and storeroom in connection with kitchens in hotels must be painted, and woodwork varnished or painted, so that they can be washed when dirty. The use of paper or calcimine on walls and ceilings in a hotel kitchen, pantry or storeroom in connection therewith is prohibited.

(e) Surfaces, with open cracks on which food is prepared, or dishes are washed, shall be covered with metal or other non-absorbent material.

(f) All kitchen utensils in hotels shall be thoroughly cleaned after each meal, and when not in use shall be properly protected from all dirt, insects and rodents.

(g) All stoves, sinks, dish washing apparatus, wash racks, tables, meat blocks, and meat racks must be kept clean.

(h) All foods when displayed in hotel-restaurants must be properly protected from flies, insects, dirt and dust, and be protected from handling by the public.

(i) Contents of cans must be removed as soon as cans are opened. The practice of leaving contents in cans after opening is dangerous.

(j) Meats must not be placed in direct contact with ice. Foods with distinctive odors should, when possible, be kept in compartments separate from other foods subject to absorbing such odors.

(k) Decayed, contaminated or unwholesome meats, vegetables, or other food products, shall not be served in any hotel or stored in any hotel ice-box or storeroom. All places where foods are prepared or stored shall be kept in a clean and sanitary condition. Dogs and cats must be excluded from hotel kitchens.

(l) Vegetable and food storerooms in basements of hotels must be whitewashed or painted when required.

(m) The drains from ice boxes and refrigerators must be connected with sewer and properly trapped where sewer is available. Where sewer is not available drains must be provided for all ice boxes and the waste disposed of in such a manner as to avoid nuisances or menaces to health.

(n) Every hotel shall be provided with a suitable dressing room for employes, which must be separate from the kitchen. Employes or other persons must not use the kitchen or places where foods are kept, as a cloakroom, dressing room or sleeping room. Every hotel kitchen must be supplied with a suitable washroom or wash basin and with soap and individual towels for employes, and all employes must, before beginning work, after using toilets, and at all other times where necessary, wash their hands with clean water and soap. Toilets or water-closets in hotel kitchens are prohibited.

(o) All employes in hotels must keep clean and wear clean clothing at all times. All such employes must refrain from using tobacco while

on duty. No person suffering from a communicable disease shall be employed in any capacity in a hotel, and when the presence of such a disease is suspected, the employe may be required to present a certificate from a physician or health officer certifying that he is free from a communicable disease. No person who has been afflicted with typhoid fever within three years shall be employed in a hotel until it has been definitely determined that such person is not a typhoid carier.

(p) All places and receptacles where prepared food, or food to be served in the raw state, is kept or stored, must be mouse-and-rat-proof and must be properly protected against flies, cockroaches and other vermin.

Rule VI. Garbage

All garbage and kitchen refuse must be kept in water-tight metal cans provided with close-fitting metal covers, unless otherwise protected from flies and vermin, and the contents must be removed as often as necessary to prevent decomposition and overflow. The use of wooden containers is prohibited either in the kitchen or on the premises. Separate containers must be provided for cans, bottles, and similar rubbish. Where garbage chutes or conveyors are used they must be constructed so as to exclude from the building all odors arising from such garbage. No waste water, including dishwater, shall be discharged on or near the premises so as to create a nuisance.

Rule VII. Water and Ice

All water for drinking and culinary purposes in hotels shall be free from contamination. The use of contaminated, unwholesome or impure ice in drinks or the cooling of foods by direct contact is prohibited.

Rule VIII. Dining Room

(a) The dining rooms, and all places where meals are served in hotels shall be kept clean, well ventilated, heated, lighted, and in a sanitary condition. This shall include the proper cleaning of the floors, ceilings, walls, tables, chairs, trays, and all other dining room equipment.

(b) The dining room shall be equipped with serviceable furniture.

(c) Tablecloths and pads must be kept clean.

(d) Napkins must be provided. Cloth napkins must be washed and ironed after being used by any guest.

(e) The use in hotels of dirty or cracked dishes or glasses in which food or drink is prepared or served, or of dirty silverware, is prohibited.

(f) All dishes, silverware, glasses, and all other dining room utensils must be thoroughly washed and rinsed with boiling water or steam and properly dried after being used by any individual.

(g) Finger bowls, when used, must be filled with fresh, pure water for each guest.

Rule IX. Sleeping Accommodations

(a) Every sleeping room shall be of sufficient size to afford at least 400 cubic feet of air space for each occupant over 12 years of age, and 200 cubic feet for each occupant under 12 years of age. No greater number of occupants than thus established shall be permitted to sleep in any one room.

(b) Sleeping rooms must be kept in good repair. The ceiling, walls and floor shall be free from dirt.

(c) No room shall be used for a sleeping room in any hotel heretofore constructed which does not have an adequate opening, other than a transom over the door, to the outside of the building, or to well ventilated light wells, air shafts, courts or hallways. Light wells, air shafts and courts in such hotels must be open at the top, or provided with approved ventilators to furnish proper ventilation.

Note: In rooms having an outside window, or a window opening on a well ventilated light well, air shaft or court, proper ventilation can be secured if the window is opened at the top and bottom, and an adjustable shield is placed at the bottom to prevent drafts.

(d) At least one window in each sleeping room must be so constructed to permit it to be raised from the bottom or lowered from the top at any time. If storm windows are used, at least one for each sleeping room shall be either suspended from the top, or hinged from the sides, so that it can be opened and closed readily.

(e) Doors to sleeping rooms shall be provided with proper facilities for locking.

(f) Each room must be provided with at least one chair, two clothes hooks, and where an individual toilet is not available, with a chamber; and where running water is not supplied, must be furnished with clean wash water, pitcher, wash bowl, and slop jar. Upon request every guest shall be supplied with pure, wholesome drinking water.

(g) Clean, individual towels must be supplied in all cases.

(h) All bedroom furnishings must be kept clean and free from odor. Rugs and carpets shall be kept clean and be thoroughly renovated at least once a year, and oftener when deemed necessary by the Hotel Inspector.

NOTE: Rugs are recommended for use in sleeping rooms in place of carpets.

(i) Where sleeping and dressing rooms are provided for employes, they shall be properly lighted, heated, ventilated and kept clean.

(j) All hotels not equipped with all night illumination must provide each sleeping room with a serviceable lamp or candle and matches.

(k) Repapering or calcimining of ceilings or walls of toilet rooms, wash rooms, bathrooms, linen rooms and closets is prohibited. Paint or other non-absorbent covering is recommended.

NOTE: For rules regulating artificial lighting of new buildings, see State Building Code, issued by the State Industrial Commission.

For lighting of hallways and exits of old buildings, see general orders of Industrial Commission.

Rule X. Bedding

(a) All hotels shall provide each bed, bunk, cot or other sleeping place for the use of transient guests with white cotton or linen pillow slips, top and under sheets, also mattress, and a reasonably sufficient quantity of bedding.

(b) The top and under sheet shall be of sufficient size to completely cover the mattress and fold under on sides and ends. Both sheets must be at least 96 inches long after being hemmed and laundered. The use of quilts and comforts on transient beds is prohibited. The long top sheet is to be folded back at the head of the bed so as to cover all top coverings, at least twelve inches.

(c) All bedding, including mattresses, blankets, pillows and sheets, used in any hotel must be thoroughly aired and kept clean. No bed-

ding shall be used which is worn out and unfit for further use. Pillow slips and sheets must be washed and ironed as often as they shall be assigned to a different guest.

Rule XI. Communicable Diseases

Whenever a room in any hotel has been occupied by a guest ill with a communicable disease, it shall be thoroughly disinfected in accordance with the rules of the State Board of Health, before being occupied by another guest.

Rule XII. Sample Display Rooms

All sample display rooms shall be kept clean, and provided with sufficient light, heat and ventilation.

Rule XIII. Screens

(a) All windows, doors and other unprotected openings to the outside of the building, in kitchens, dining rooms, cellars and public offices of every hotel must be properly screened against insects.

(b) All sleeping rooms in every hotel having a window opening to the outside of the building must be provided with a suitable screen, and in rooms having more than one window, screens shall be provided for at least two windows in every such room.

Rule XIV. Premises

All premises connected with, or used by any hotel shall be kept in a sanitary condition, and it shall be the duty of the local health officer, either upon his own initiative or upon the complaint of any citizen, deputy state health officer, or hotel inspector, to take such action as may be necessary to abate any nuisance, source of filth, or cause of sickness existing on the premises as required by section 1414 of the Statutes. The ceilings, wall and floors in all cellars or basements used in connection with hotels must be kept clean. The ceiling and walls in every hotel cellar or basement where food is kept or stored must be whitewashed or painted as often as necessary to keep them in a sanitary condition.

Rule XV. Fire Escapes and New Buildings

For the construction of new buildings and fire escapes, consult the State Building Code, issued by the State Industrial Commission.

Rule XVI. General Provisions

(a) All hotels equipped with sewerage and running water must be provided with bubbling drinking fountains, located in the office or lobby. In all hotels where bubbling fountains can not be installed, a supply of pure drinking water shall be kept in a cooler in the office or lobby for the use of guests and clean individual cups or glasses must be provided upon request.

(b) Chapter 274, Laws of 1913, makes it unlawful for any person, firm or corporation to sweep, or permit sweeping in hotels, restaurants and other public places where the public is invited, unless the floor is first sprinkled with water, moist sawdust or other substance to prevent the raising of dust. When vacuum cleaners, or properly filled reservoir dustless brushes are used, the sprinkling or use of moist sawdust is not required.

(c) All floors and interior woodwork in hotels shall be cleaned as often as necessary to keep them in a sanitary condition.

(d) All cuspidors wherever used, must be cleaned daily and kept free from odor.

Rule XVII. Repeal of Rules and Regulations

The rules and regulations adopted by the State Board of Health on April 6, 1914, and published in the official state paper on April 7, 1914, and the amendments to these rules and regulations adopted by the board on January 31, 1917, and published in the official state paper on Febuary 8, 1917, are hereby repealed.

Dr. Fiedler then moved that the following rules and regulations governing the safe and sanitary conditions of restaurants be adopted and ordered published. Motion seconded by Dr. Windesheim and carried.

RULES AND REGULATIONS OF THE STATE BOARD OF HEALTH

Under Chapter 648, Laws of 1913.

Governing the Sanitary and Safety Conditions of Restaurants in Wisconsin.

These rules and regulations were officially adopted by the Wisconsin State Board of Health on January 26, 1921, and published in the official state paper on February 5, 1921. Such rules and regulations therefore have the full force of law.

Section 1. Permits

Chapter 648, Laws of 1913, defines a restaurant as follows: "The term 'restaurant' as used herein shall mean and embrace all buildings or other structures kept, used and maintained as places wherein meals or lunches are served without sleeping accommodations for transient guests, together with all buildings or places used in connection therewith."

Before opening for business every restaurant owner or manager shall obtain a permit from the State Board of Health, the fee being Two Dollars for each restaurant. The permit shall be renewed on or before January 1 of each year. Such permit is not transferable from one location to another or from one person to another. The restaurant permit must be conspicuously displayed in each restaurant. A copy of the restaurant rules and regulations must be posted in a convenient place for the employes. Every restaurant in this state shall be conducted in every department in a manner most conducive to the comfort and safety of its guests and employes, in accordance with standards prescribed by rules and regulations and orders issued in conformity to law.

Section 2. Sanitary Equipment

All restaurants in cities, villages and towns adjacent to a public sewer system and public water supply shall be equipped with a suitable sink in the kitchen and a suitable lavatory connected in a proper manner with the public sewer and water systems. The State Board of Health may require separate lavatory or toilet rooms for each sex.

Section 3. Lavatories and Toilets.

All plumbing in restaurants must be installed and maintained in accordance with the State Plumbing Code issued by the State Board of Health.

Every toilet room in a restaurant shall have adequate artificial illumination during the entire period that the building is occupied, wherever and whenever adequate natural light is not available, so that all parts of the room are easily visible.

Restaurants provided with public washrooms must be supplied with clean individual towels as provided by law. The use of common roller towels is prohibited.

Section 4. Outside Toilets

In all cities and villages not having a system of waterworks, every restaurant shall have properly constructed privies with vaults to receive the night soil, the privies to be kept clean and well screened at all times and free from all filth. Separate compartments, properly designated, shall be furnished for each sex.

Note: For location and construction of outside toilets, see State Plumbing Code, issued by the State Board of Health.

Section 5. Kitchen

(a) Every kitchen connected with a restaurant shall be properly lighted and ventilated. Ventilation must be sufficient to remove the gases and fumes caused by the preparation of foods.

(b) The doors, windows and any other openings in restaurant kitchens must be properly screened against flies and other insects.

(c) Walls, ceilings and floor in every kitchen in connection with a restaurant must be kept clean and in good condition at all times.

(d) The walls and ceilings in every kitchen, pantry and storeroom in connection with kitchens in restaurants must be painted, and woodwork varnished or painted, so that they can be washed when dirty. The use of paper or calcimine on walls and ceilings in a restaurant kitchen, pantry or storeroom in connection therewith is prohibited.

(e) Surfaces with open cracks on which food is prepared, or dishes are washed, shall be covered with metal or other non-absorbent material.

(f) All kitchen utensils in restaurants shall be thoroughly cleaned after each meal, and when not in use shall be properly protected from all dirt, insects and rodents.

(g) All stoves, sinks, dish-washing apparatus, wash racks, tables, meat blocks, and meat racks must be kept clean.

(h) All food when displayed in restaurants must be properly protected from flies, insects, dirt and dust, and be protected from handling by the public.

(i) Contents of cans must be removed as soon as cans are opened. The practice of leaving contents in cans after opening is dangerous.

(j) Meats must not be placed in direct contact with ice. Foods with distinctive odors should, when possible, be kept in compartments separate from other foods subject to absorbing such odors.

(k) Decayed, contaminated or unwholesome meats, vegetables or other food products, shall not be served in any restaurant nor stored in a restaurant ice-box or storeroom. All places where foods are prepared or stored shall be kept in a clean and sanitary condition. Dogs and cats must be excluded from restaurant kitchens.

(l) Vegetable and food storerooms in basements of restaurants must be whitewashed or painted when required.

(m) The drains from iceboxes and refrigerators must be connected with sewer and properly trapped where sewer is available.

Where sewer is not available drains must be provided for all ice boxes and the waste disposed of in such a manner as to avoid nuisances or menaces to health.

(n) Every restaurant shall be provided with a suitable dressing room for employes, which is to be separate from the kitchen. Employes or other persons must not use the kitchen or places where foods are kept, as a dressing room, cloak room or sleeping room. Every restaurant must be supplied with soap and individual towels for employes, and all employes must, before beginning work, after using toilets, and at all other times when necessary, wash their hands with clean water and soap. Toilets or water-closets in restaurant kitchens are prohibited.

(o) All employes in restaurants must keep clean and wear clean clothing at all times. All such employes must refrain from using tobacco while on duty. No person suffering from a communicable disease shall be employed in any capacity in a restaurant, and when the presence of such a disease is suspected the employe may be required to present a certificate from a physician or health officer certifying that he is free from communicable disease. No person who has been afflicted with typhoid fever within three years shall be employed in a restaurant until it has been definitely determined that such person is not a typhoid carrier.

(p) All places and receptacles where prepared food, or food to be served in the raw state, is kept or stored, must be mouse and rat-proof and must be properly protected against flies, cockroaches and other vermin.

Section. 6. Garbage

All garbage and kitchen refuse must be kept in water-tight metal cans provided with close-fitting metal covers, unless otherwise protected from flies and insects, and the contents must be removed as often as necessary to prevent decomposition and overflow. The use of wooden containers is prohibited either in the kitchen or on the premises. No waste water, including dish water, shall be discharged on or near the premises so as to create a nuisance. Separate containers must be provided for cans, bottles, and similar rubbish.

Section 7. Water and Ice

All water for drinking and culinary purposes in restaurants shall be free from contamination. The use of contaminated, unwholesome or impure ice in drinks or for cooling of foods by direct contact is prohibited.

Section 8. Dining Room

(a) Dining rooms and all places in restaurants where meals or lunches are served shall be equipped with serviceable furniture, kept clean, well ventilated, heated and lighted. This requirement shall include the proper cleaning of the floors, walls, tables, chairs, trays and other dining room equipment.

(b) The dining room shall be equipped with serviceable furniture.

(c) Tablecloths and underpads when provided must be kept clean.

(d) Napkins when provided must be washed and ironed after being used by any guest.

(e) The use in restaurants of dirty or cracked dishes or silverware, is prohibited.

(f) All dishes and silverware, glasses, and all other dining room utensils must be thoroughly washed and rinsed with boiling water or steam and properly dried after being used by any individual.

(g) Finger bowls, when used, must be filled with fresh, pure water for each patron.

Section 9. Sleeping Accommodations

All sleeping quarters where provided for restaurant employes must comply with the requirements of the State Building Code.

Note: All remodeling, additions or new buildings must conform with the State Building and Plumbing Codes.

Section 10. Inspection Requirements

Whenever upon inspection of a restaurant by the State Board of Health, or one of its employes, it shall be found that such restaurant or the property so inspected is not conducted nor equipped as required in the above rules, the Department shall notify the owner, proprietor or agent in charge thereof. Such notice shall be given in writing and shall specify the requirements of the Department to make such place of business conform with the standards set forth in the rules and the time within which compliance must be had.

Section 11. Repeal of Rules and Regulations

The rules and regulations adopted by the State Board of Health on April 6, 1914, and published in the official state paper on April 7, 1914, and the amendments to these rules and regulations adopted by the Board on January 31, 1917, and published in the official state paper on February 8, 1917, are hereby repealed.

The request made by Dr. Ruhland of Milwaukee that the present diphtheria rules be amended so as to provide for the immediate release of contacts upon obtaining negative cultures from the nose and throat was discussed. The board voted that in view of the present widespread prevalence of diphtheria in the state, the rules should not be changed at this time.

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The state health officer next presented the following brief review concerning new health legislation enacted by the 1921 legislature:

"I am pleased to inform the board that the present legislature has been very attentive to the health needs of the state and has enacted several important pieces of health legislation. The following is a list of the more important health bills enacted into law:"

Chapter 85, relating to furnishing quarantine signs and placards to local health officers at cost.

Chapter 87 relates to the registration with the State Board of Health of all public health nurses and provides for the certification by the board of these nurses for local employment.

Chapter 98 relates to appropriation for state health work. In addition to fees received under the licensing laws, the legislature has given us a fund of $51,000 per year for general administration, $41,250 per year for venereal disease control, $13,300 per year for the operation of a Bureau of Communicable Diseases, $5,000 per year

for the supervision of rest rooms and comfort stations and $31,100 during the first year and $21,100 during the second year of the next biennium for the operation of a Bureau of Child Welfare and Public Health Nursing. The appropriations for silver nitrate and laboratories are continued as they were for the past two years.

Chapter 119 outlines the procedure for legally placarding homes and other places.

Chapter 152 legalizes advertisements by the state or city relating to the prevention and treatment of venereal diseases.

Chapter 182 amends the present law relative to quarantine so as to permit certain persons to visit the quarantined home.

Chapter 223 includes sleepy sickness and pneumonia as reportable diseases.

Chapter 230 amends the slaughterhouse law so as to prohibit the business of slaughtering where a slaughterhouse is not provided; such business of slaughtering comes under the law now governing the location of buildings where slaughtering is done.

Chapter 212 amends slightly the present barber law.

Chapter 173 increases the fees for the renewal of master barber licenses from $1 to $2.

Chapter 258 provides for full-time local health officers in all cities having a population of 25,000 or more.

Chapter 365 transfers the registered nurse law from the Board of Medical Examiners to this board.

Chapter 372 amends the present law relative to the control of smallpox, by decreasing the exclusion period when smallpox is present from twenty-five days to fourteen days, authorizes this board to issue the exclusion order also, and makes provision for the State Board of Health to determine the methods to be employed, designates the person to do the work, etc.

Chapter 464 relates to the licensing of embalmers and increases the renewal fee from $1 per year to $2.

The state health officer reported to the board that a bill was introduced in the legislature authorizing an increase in the compensation of the deputy state health officers from $3,000 per year to $3,600. This bill was defeated as was another one authorizing an increase in the compensation to $3,500 per year. Dr. Fiedler then moved that the salary of the deputy state health officers be fixed at $3,000 per year from July 1, 1921. Motion seconded by Dr. Steffen, and carried.

The organization of the Bureau of Communicable Diseases was next considered. Dr. Robert Olesen, who is on detail here from the Public Health Service, appeared on invitation and urged the board to make provision for the combination of the Bureau of Communicable Diseases with the Bureau of Venereal Diseases. Dr. Olesen also urged that if possible the five deputy state health officers be relieved as much as possible of the nuisance inspection work, which they are now doing, so that they can devote all of their time and ability to the communicable disease problem. He urged the estab-

lishment of a Bureau of Sanitary Inspection as is provided for in some other states so that medical men on the staff can be relieved of nuisance work. After a full discussion Dr. Fiedler moved that the Bureau of Venereal Diseases and the Bureau of Communicable Diseases be consolidated into one bureau under the general supervision of the Bureau of Communicable Diseases. Motion seconded by Dr. Windesheim and carried.

Mr. King, the domestic sanitary engineer, explained several amendments to the state plumbing code and asked that they be adopted. It was pointed out that the adoption of these amendments would not lower the standard for plumbing construction, but would in some instances materially decrease the cost of such construction. Dr. Fiedler then moved that the following amendments to the state plumbing code be adopted and ordered published. Motion seconded by Dr. Windesheim, and carried.

RULES OF THE STATE BOARD OF HEALTH

The rules and regulations known as the Wisconsin State Plumbing Code, adopted by the State Board of Health on April 6, 1914, and published in the official state paper on April 10, 1914, were amended by the State Board of Health on June 28, 1921, pursuant to Chapter 831, Laws of 1913 (Section 951—55a of the statutes), to read as follows:

The following definitions as contained under the sub-title "Definitions and Explanation of Terms" of the State Plumbing Code are amended to read:

Definition of Terms

House Sewer or Main Drain is that part of the horizontal piping beginning three feet from the foundation wall to its connection with the main sewer or cess pool or bacterial tank, or other disposal terminal.

Conductors or Roof Leaders are the pipes which carry the storm or rain water from the roofs of buildings to the house, storm or yard sewer, basin or rain water cistern. The vertical portion of the conductors is usually referred to as the "down-spout" and may be located within or outside the building.

Rural or Isolated Buildings are understood in this code to be those situated at such distance from a public sewer system that their drainage systems cannot become tributary thereto.

Wiping a Joint is a method of joining two pieces of metal, in which the solder is fused on the joint and wiped to a smooth, neat finish with a wiping cloth, and having a thickness of solder over that part of the joint where the metals join of not less than one-fourth inch.

Alignment is understood in this code to indicate "in a straight line," graded, horizontal or perpendicular.

The following definitions are added to read:

Plumbing Work embraces all piping and appurtenances in connection with the drainage, ventilation or water supply systems within,

and to a point from three to five feet outside the building or other parts of the structure, and may include the water service and house drain piping and appliances to the mains in the street, alley or other terminal.

A Storm Drain is a conduit for carrying off surface, storm and clear waters.

A Combined Sewer is a sewer or drain intended to receive domestic sewage, industrial water-carried weights, surface, storm and clear water.

Local Vent is a pipe or shaft serving to convey the foul air from plumbing fixtures or room to the outer air.

Free Circulation of Air for the purpose of this code is understood to mean a plumbing and drainage system so designed and installed as to keep the air within the system in free circulation and movement and to prevent with a margin of safety unequal air pressures of such force as might blow, syphon or affect trap seals, or retard the discharge from plumbing fixtures.

Brased Joint is a method of joining substantially two pieces of metal by telescoping the parts to be joined and fusing by means of soft solder or solder made of granulated yellow brass.

Repairs and Stoppages. Repairs are defined to consist of fixing leaks and removing of obstructions in soil, waste and supply pipes and the fixing of defective valves, faucets and similar appliances.

Basement may be defined as that portion of the building whose floor line is below the grade at the main entrance and whose ceiling is not more than nine feet above the grade. The first floor is that next above the basement, or the lowest floor if there is no basement. The total number of stories in a building is understood to embrace all stories except the basement.

Height of Building shall be measured at the center line of its principal front, from the street grade (or if setting back from the street, from the grade of the ground adjoining the building), to the highest part of the roof, or if a gabled or hipped roof to a point two-thirds of the height of the roof. If the grade of the lot or adjoining street in the rear or alongside of the building falls below the grade at the front, the height shall be measured at the center of the building.

Approved. The term "approved" means approval by the local plumbing or building inspector or State Board of Health or Industrial Commission in conformance with the respective laws and regulations governing.

Rules and Regulations of the Wisconsin State Board of Health Governing the Construction, Installation and Inspection of Plumbing and Drainage.

The following sections of the State Plumbing Code are amended to read:

Section 4. (b) **Sizes and Grades of Drains.** The size of a house sewer or drain, if a sanitary sewer, shall be determined by the number of fixtures served; if a combined sewer by the roof area to be drained and other waters tributary to the same; but in no case shall the sewer or drain be less than six inches in diameter from the main sewer in street to curb line.

All drains outside of buildings from main sewer to lot line and designed to receive solid substances must be at least six inches in diameter, must have a grade of one-fourth (¼) inch per foot or more but in no case shall the grade be less than one-eighth (⅛) inch per foot; providing that underground house drains for residences or other small buildings, may be constructed of four-inch cast iron pipe from main in street or lot line, installed in the manner as prescribed for soil pipe and provided further:

(1) that the surface area covered by the buildings and drains tributary so connected to a combination sewer does not exceed 1,500 square feet.

(2) that the amount of sewage tributary from plumbing fixtures and appliances where the building is connected to a sanitary sewer does not exceed the carrying capacity of the four-inch pipe so installed.

No house drain serving any fixture shall be less than 4 inches in size, and all underground drains within the building shall be considered as part and parcel of such house drain. Provided that branch drains serving basins, sinks, or similar small fixtures arising perpendicularly or at an angle of 45 degrees, not exceeding 5 feet in length, may be made of a size as required in Chart A. It is further provided that a 2-inch cast iron pipe laid at a fall of ¼ inch per foot, not to exceed 5 feet in length, may be used to serve as a 2-inch basement floor drain.

(c) **Additional Grade Permitted.** In cases where main sewer in the street has sufficient depth or where a lot is three feet or more above grade line, the drain between the curb line and lot line may receive such greater inclination as may be provided for by local ordinance or as in the judgment of the authorized inspector is permissible.

(d) **Drains, Ends and Connections Guarded.** The ends of all sewer and drain pipes not immediately connected shall be securely closed so as to prevent the introduction of sand or earth; and where the end of the sewer or drain pipe is connected with temporary catch basin for draining foundations during the erection of any buildings or for other purposes the drainlayer shall guard the same against the introduction of sand or earth.

(e) **Change in Direction or Alignment.** All sewer and drain pipes shall be laid carefully in a trench with perfect alignment where the bottom is trimmed to a perfect grade; and any deviation or change of direction from a straight run should be made by the use of proper curves and Y's. No sewer or drain pipes shall be clipped where proper fittings can be used for change of direction. Joints shall be made in accordance with Section 23.

(f) **Connection to Main Sewers.** When in accordance with measurements furnished by the local governing body or its authorized representative the sewer connection is not found within three feet of the direction of the flow, a slant connection and ⅛ bend shall be used, or if a small drain a proper connection inserted, and such connection or insertion shall be made under the direction of the authorized representative of the municipality.

(g) **Back Filling.** Back filling must be made with due care, in a workmanlike manner and according to approved standards and methods, so as to prevent breakage and settling of the sewer or drain.

Chart A

Soil, Waste and Vent Pipes, Water-Closets Permitted on a 4-Inch Soil Pipe Stack.

10 on a 4-inch pipe.
11 to 25 on a 5-inch pipe.
26 to 60 on a 6-inch pipe.
61 to 100 on an 8-inch pipe.
101 to 175 on a 10-inch pipe.

Section 5 (a) **Materials—How Protected.** All main branch, soil, waste, vent and back vent pipes shall be made of cast iron, coated with tar or asphaltum, galvanized wrought iron or galvanized steel pipe, or lead, brass or copper. No galvanized iron or steel drainage, waste or vent pipe shall be laid underground. All lead, galvanized wrought iron or steel water, soil, waste or vent pipes or branches thereof, including traps and connections when installed so as to be embedded or passed through concrete, shall be protected against the corrosive action of such concrete by thoroughly applying one or more coats of asphaltum paint or adequate tar paper wrapping or both; or by other equivalent means of insulation.

(b) **Minimum Size of Vent Stack.** Where not more than two water-closets are installed below the first floor and serve as the only closets in the building, the vent pipe shall not be less than two inches. In determining the size of the vent pipe, allow in addition to the closet, one bath, one basin, one sink or other similar fixture provided that such vent pipe shall not be used as a waste or wet vent pipe. The size of the vent and waste pipes for basins, sinks, baths, or other similar fixtures when they serve as the only fixtures in a building, shall be governed by the provisions of Chart A.

Section 6 (b) **Protection from Frost.** All drain, soil, waste or vent and supply pipes shall, unless wholly impracticable, be placed within the walls of the building and shall be as direct as possible, properly protected from frost and when possible arranged so as to be readily accessible for inspection and repairs.

Water pipe shall be so graded and installed that it may be readily drained.

Section 7. **Branch Soil and Waste Extensions.** Any branch extending from a soil or waste pipe, running vertically, horizontally, or both, shall be carried full size to fixture connections and may be vented or revented to conform with the provisions of Chart A.

Section 8. (b) **Unit Vent.** Two water-closets located on the same floor discharging into a double Y or sanitary Tee cross or one closet discharging into a Y branch or sanitary Tee need not be back vented, providing that the developed distance of the horizontal soil branch extended with a grade of not less than ¼ inch per foot does not exceed the inside diameter of the soil branch and the vertical leg between the horizontal soil branch and the trap water level does not exceed 3 feet. (See sketches.)

(c) **Fixtures Other than Water-Closets.** Two fixtures other than water-closets discharging into a double Y or sanitary Tee cross or an individual fixture other than water-closet discharging into a Y branch or sanitary Tee with no other fixtures discharging into the same pipe above them, need not be back vented, provided the total fall of the waste pipe between the water level of the trap and the vent pipe extended at a grade of not less than ¼ inch per foot does not exceed the inside diameter of the branch waste pipe.

(e) **When Deep Seal Resealing Traps of the Centrifugal, Self Scouring Type May be Used.**

1. When a common trap is not adequate protection against sewer air.

2. When the total fall of the soil or waste pipe between the water level of the trap and the point of venting exceeds the inside diameter of the waste pipe, extended at a grade of not less than ¼-inch per foot, provided that the vertical leg between the horizontal waste branch and the trap level of sinks, wash basins and similar fixtures does not exceed five feet and that the total developed length of the entire waste pipe, including the vertical leg, conforms with the provisions as shown in chart and sketch.

(3) When it is impractical to vent, a deep seal resealing trap shall be installed. So far as practical a free circulation of air must be provided.

Section 9. **Continuous or Circuit Vent Installation.** Batteries of closets, urinals, sinks, basins, etc., may be installed by the continuous or circuit vent system. Loops and circuit vents shall be of the following sizes: 2 inches for a battery of two closets, 3 inches for a battery of six closets, 4 inches for a battery of seven or over. For urinals, sinks, basins, or similar fixtures the loop or circuit shall be of the waste pipe size provided for in Chart A. Methods for such installation are shown in sketches.

Section 10. **Back Vents Not Required.** Where a house drain is served by a soil, waste or vent stack at least two inches in diameter, water-closets, not to exceed two in number, basement or cellar floor drains, subsoil traps, elevator catch basins or similar receptacles need not be back vented when branched into horizontal house drain five feet or more in the direction of the flow from the base of a soil or waste pipe stack.

Section 14. (b) **Weights of Cast Iron Pipe and Fittings.** Wall thicknesses of such fittings and the hubs thereof shall correspond with that of the pipe of the same size and kind.

Section 19. (a) **Traps.** Each fixture, except those wasting as described in this section, shall be separately trapped by a water seal trap, placed as close to the fixture as possible.

Every trap shall be self-cleaning. No form of trap shall be used which depends upon the action of movable parts for its seal.

No trap shall be used which depends upon concealed interior partitions for its seal, unless such interior partitions are made of indestructible material.

No trap shall be used which in case of defect would allow the passage of sewer air.

Grease traps with integral cast partitions of indestructible material may be used.

Drum traps not less than four inches in diameter and having a seal of not less than two inches shall be used under all bath tubs and shower baths, wherever practical.

Traps for bath tubs, basins, sinks or other similar fixtures shall be made of lead, brass or iron. For depth of trap seals see Chart I and for size see Chart A. Each trap shall have a water seal of not less than two inches. Laundry trays, wash tubs, or similar fixtures may waste into single trap. The outlet waste pipe and trap of three or four compartments should be at least 2 inches in diameter.

(b) **Trap Clean-Outs.** All traps shall be equipped with adequate brass screw clean-out plugs or covers, readily accessible, except those which are integral parts of fixtures.

Traps for urinals rising from floor and those serving shower baths and floor drains may be installed as shown in sketch.

(e) **Traps or Rain Water Leaders.** One trap may serve for one or more rain water leaders, providing no part of said pipe is used for a soil or waste pipe. When rain water leaders are carried up to the roof of a building they need not be provided with traps, unless such conductors terminate within 12 feet of any door, window, ventilating hood or air intake. Connections for roof leaders inserted between main in street and main house trap, where such house trap is installed, shall be separately and effectively trapped, the traps to be so located as to insure them against frost.

Section 21. **Back Flow Valves.** Drain pipes from fixtures shall be provided with adequate backwater valves when subject to back flow or backwater from sewer. Such backwater valves shall be so placed as not to interfere with the flow or discharge of any conductor or rain water leader or other fixture, and be readily accessible for cleaning and means for a free circulation of air shall be provided by an adequate revent pipe or fresh air inlet as the case may require.

Section 22 (a) **Clean-Outs.** Where main house traps are installed, cast iron pipe shall be extended from handhole of trap to point two inches above the surface of finished floor or grade. All clean-outs in house drains shall be at least four inches in diameter.

Where no main house trap is installed a four-inch clean-out shall be provided on the house drain at a point where it leaves the building.

All additional clean-outs for main house drain shall be extended where practicable to a point two inches above the surface of the finished floor or grade, and be of adequate size and so installed as to serve the purpose for which they are intended.

At least one clean-out shall be provided on horizontal sink or similar waste lines, and in cases where changes in direction occur additional clean-outs shall be installed, all so located that they are accessible and serve the purpose for which they are intended. (See sketches.) All soil and waste stacks so constructed that stoppages are liable to occur at their base shall be provided with clean-out plugs.

Section 28 (b) **Inside Leaders.** All roof leaders placed within the walls of any building, in an interior court, ventilating or pipe shaft, shall be installed as specified for soil, waste and vent pipes when connected to a combined sewer drain.

(c) **Rain Water Connected to Storm Sewers.** Rain water leaders within the building connecting to storm sewers shall be treated in the same manner as those entering a combined system except that pipe used in construction may be cast iron, galvanized, asphaltum coated or black iron pipe.

Section 30. **Small Residence Installations.** Where plumbing is to be installed in a small residence draining into a residential sewage disposal or other terminal, it may be installed in accordance with sketches.

Every fixture trap shall be protected from siphonage and air circulation assured by means of a fresh air inlet and revents where necessary.

Section 33. **Waste Pipes for Acid Tanks.** The waste pipes and traps for acid tanks, sinks and other receptacles receiving the dis-

charge of acids in chemical laboratories, electrotyping, lithographing and other similar establishments must be made of extra heavy cast iron, coated inside and out with tar and asphaltum, extra heavy lead pipe, or lead-lined iron pipe of adequate durability. The waste pipes when serving as a local conveyor between acid tank, dilution tank or other receiving basin may be of vitrified clay incased in concrete of substantial construction and provided with a vent pipe to the open air where necessary.

Section 39. **Basement Floor Drains.** Cellar or basement floor drains will not be permitted unless they connect into a deep seal trap so constructed that it can be readily cleaned and of a size to serve efficiently the purpose for which it is intended and so located that the inlet is at all times in full view. (See section No. 10 (b).

Section 41. **Wastes From Laundries and Similar Establishments.** Waste pipes in dye houses, breweries, bottling works, creameries, laundries and similar establishments where much water is used may discharge directly into a non-absorbent floor, provided with an adequate number of floor drains, which drains must be connected to the house or yard catch basin by means of cast iron or vitrified pipe. Gutters that can be easily cleaned and kept in efficient operating condition may be provided for collecting and conducting wastes to floor drains equipped where necessary with a suitable screen for arresting the coarser materials that would otherwise enter the system.

Section 51 (b) **Frost-Proof Closets, When Permitted.** Frost-proof closets will be permitted in buildings when extreme conditions necessitate their use. When installed, the bowl must be of vitreous chinaware or cast iron enamel of the flush rim pattern, provided with an adequate tank automatically drained. The soil pipe between the hopper and the cast iron trap shall be of 4-inch cast iron free from offsets and only of sufficient length to protect the trap against frost; but in no case shall the soil pipe between the trap and hopper bowl be more than 6 feet in length.

For method of installing outdoor closets see sketch.

Private Water Supply and Sewage Disposal

Section 56 (a) **Public Water Supplies.** The plan and specifications for all public water supplies must be submitted to the State Board of Health for approval before such systems can be legally installed. (Chapter 447, Laws of 1919, known as Sections 1407-m—1 to 1407m—4, inclusive of the statutes.

(b) **Private Water Supplies.** All private water supplies hereafter constructed shall be from a well, spring, lake or flowing stream which is not contaminated and which can be protected readily from contamination. Where possible all wells shall be cased with iron or steel, or curbed with vitrified pipe or concrete to the level of the water in the well, or deeper. The top of the well must be protected from surface water and drippings by a water-tight platform. Springs used for water supplies shall be adequately curbed with vitrified pipe, concrete, or equivalent so as to be protected against pollution. All spring, lake or stream supplies known to be subject to occasional pollution must be either discontinued or made safe by filtration or sterilization with hypochlorite or other similar disinfectant which is not dangerous to human life, or as otherwise directed by the State Board of Health.

(c) **Private Water Supply Systems.** All private water supply systems serving public school and similar buildings and plumbing and

drainage installations in connection therewith shall be of sufficient capacity and size to provide adequate flushing facilities in order to maintain the plumbing fixtures at all times in a sanitary conditon. No water supply serving a public school or other public building shall come from a well, spring or other source situated within apparent danger of pollution.

(d) **Wells and Pumps.** Pumps for dug wells serving schools or other public buildings shall be placed on a water-tight concrete, cement faced platform not less than six feet in diameter; for drilled or driven point wells, on a platform not less than 4 by 4 feet.

The platform shall be placed at least six inches above the natural grade line, and graded up around same to within two inches of the top of the platform in such manner as to conduct all surface water away from the pump and well. The pump when placed over the well shall be attached directly to the well casing in drilled wells, and to the platform in dug wells, in such a manner as to insure a water-tight joint. Pumps located in pits over the well or within buildings shall have the intake or delivery pipes so extended into the well or spring that they cannot become a factor in the pollution of the water supply.

Sewage Treatment and Disposal Plants for Rural Buildings When a Public Sewer Is Not Available

Section 57. (a) **Sewage Disposal Plants.** Septic, biological or other sewage treatment and disposal tanks may be constructed and used where no public sewerage system is available or likely to become available within a reasonable time, or in rural districts.

(b) **Permission to Construct.** Permission to construct same may be obtained from the local plumbing inspector in cities or villages where such office is maintained; otherwise from the local health officer; or State Board of Health.

(c) **Materials, Capacity and Location.** All tanks of this kind to receive domestic sewage shall have one or more compartments constructed of substantial water-tight materials. The sewage from the building shall be discharged into a treatment tank and thence by inverted outlet to a leaching compartment, drainage tile or filter beds or into a permissable natural outlet. (See drain tile and sections 58 b, c and sketches.)

The size of the tank should be based on the number of persons using or occupying the building to be served. The treatment tank shall have a liquid contents capacity equivalent to a flow of 30 gallons of sewage (4 cu. ft. per person per day). But every such tank should have a capacity of not less than 32 cubic feet (2 ft. wide, 4 ft. long by 4 ft. deep) below the bottom of the outlet pipe. Where unusually large volumes of laundry or other clear water are tributary to the tank the capacity should be increased in the ratio of one cubic foot of space to every 20 gallons of such surplus water.

The discharge of surface and rain water leaders and cistern and other overflow pipes carrying large amounts of clear water into a septic, biological or other tank used for the treatment of sewage is prohibited.

All tanks shall be constructed with the longest dimensions parallel in the direction of the flow, which should be at least twice the width, and of a depth of not less than four feet below the outlet.

Both the inlet and the outlet shall be submerged below the level of the water in the tank. The tank, or each compartment thereof shall be provided with at least one manhole and cover.

For schoolhouses or other public buildings, the minimum capacity of the tank shall not be less than two cubic feet per person, per day. All sewage treatment tanks shall be so located as not to pollute the source of water supply.

No water-tight compartment shall be located within 2 feet of any lot line or 10 feet of any cistern or 20 feet from any well, spring or other source of water supply used for domestic purposes, and, where practicable greater distances should be provided.

(d) **Effluent From Tank.** The liquid flowing from a sewage treatment tank shall be discharged into a leaching basin, drainage tile, filter beds (see section 58 and sketches) or a water course which is not used as a water supply for domestic purposes and providing such disposition does not cause a nuisance or objectionable pollution.

Section 58. (a) The dry well shall consist of a chamber or well walled up with material which allows water to percolate through it, such as dry rubble or dry brick work. The bottom shall be left open to the soil. The dry well should not be less than 4 feet in diameter and should have a depth where practicable, of 6 feet or more below the inlet pipe depending on the character of the soil. It shall be equipped with a manhole, cover and fresh air inlet. The capacity of this compartment shall be such as to provide 1 square foot of percolating surface (including bottom) to every 5 to 10 gallons of water per day tributary to the compartment. The lower limit is to be taken for clayey or compact soil and the upper limit for sand and gravel.

(b) **Dry Wells—Where Located.** A leaching basin or dry well compartment shall not be located where there is any danger of contaminating a water supply, well, spring, lake or stream, or of causing a nuisance. Where possible the leaching compartment shall be located at least 50 feet from any dwelling or cistern and at least 150 feet from any surface well or spring. It may be permitted within 50 feet of a drilled well where the casing extends 100 feet below the surface of the ground and is driven firmly into rock (section 56). No abandoned water supply well shall be used as a cess-pool or leaching compartment for the disposal system as herein defined.

(c) **Drainage Tile and Siphon.** Drainage tile should be used in place of a dry well where the surface soil for a depth of 3 to 6 feet is sandy or gravelly. The drainage tile should be laid from 1 to 3 feet below the surface of the ground and in a very slight grade away from the tank (about 2 inches in 100 feet). The tile should be laid in straight or curved parellel lines 15 feet or more apart. The joints should be left 1-4 in. to 1-2 in. apart and blinded with burlap or broken tile. The amount of the tile laid should be based on 20 to 100 feet per person tributary to the tank according to the character of the soil. The effluent from the tank should be discharged into the tile by an adequate automatic siphon, located in a chamber adjacent to the tank.

The capacity of the siphon chamber below the water line must be equal to the cubic contents of the tile required for the particular installation and must have a water head sufficient to insure proper siphonic action.

(d) **Manhole and Cover.** All water-tight treatment tanks, siphon chambers, dry wells, or similar units shall be provided with adequate manholes extended to the surface of the ground so as to make the interior readily accessible for examination and cleaning. All such manholes shall be equipped with an adequate concrete, stone or cast-iron cover.

(e) **Methods of Ventilation.** All sewage disposal systems shall be ventilated in such a manner as to create a free circulation of air throughout the installation by the placing of fresh air inlets, extending

not less than 10 inches above the ground, at the points shown in the sketches. No such fresh air inlet shall be placed within 20 feet of any window, door or other air intake in connection with any building used for human habitation.

(f) **Piping.** The drain extending from the building to the treatment tank may be made either of vitrified clay pipe or cast iron, installed in the manner prescribed in this code for house drains. No vitrified clay pipe shall be used where there is apparent danger of polluting the water supply.

The inlet to the treatment tank shall be of adequate size and must enter the tank above the water level and be provided with an inverted cast iron tee as shown in sketches.

The outlet from the treatment tank leading to the dry well filter trench, or other disposal unit or terminal, must be not less than a 4 inch cast iron pipe, equipped with an inverted tee placed in the wall of the tank as shown in the sketches, the bottom of the outlet pipe shall be at least 2 inches lower than the bottom of the inlet pipe.

The drain leading from the treatment tank may be either cast iron, vitrified clay, or its equivalent.

If the inverts are not used, baffle boards must be provided to keep floating solids from entering the dry well, filtration trench or other disposal unit or terminal.

(g) **Removal of Sludge and Care of Tank.** All sewage treatment tanks must be cleaned out whenever the sludge contents rise to a point where they occupy one-third of the cubic contents of the tank. Sludge removed from a sewage treatment tank or its units, must be hauled away, buried or disposed of in such a manner as not to create objectionable conditions or cause a nuisance.

(h) **Cesspools Prohibited.** No cesspool or other system for sewage disposal shall be constructed where a sewer is available, nor shall any connection from such cesspool be made with any sewer.

Cesspools now existing in premises accessible to a sewer and cesspools that may hereafter become accessible to a sewer, must be discontinued and when necessary emptied of their contents and filled with earth or ashes, and the house sewer shall be disconnected from the old cesspool and be reconnected with the public sewer.

Subsection (g) of Section 58 relating to Privy Vaults as originally adopted is repealed.

The sketches illustrating methods of plumbing construction and drainage installation referred to in this official publication are published in the State Plumbing Code. They have been adopted by the State Board of Health as an integral part of the Rules and Regulations known as the State Plumbing Code.

Discretionary Powers. When for specific reason it may be impractical to make an installation so as to comply strictly with the provisions of this code, or where new installations or additions are made reasonably in conformance with this code as it pertains to plumbing and drainage design, materials, construction and appliances, the plumbing inspectors employed by the State Board of Health shall have discretionary power to permit such modifications as are not inconsistent with the spirit and substance thereof. All such modifications must be reported in writing in a manner prescribed by the State Board of Health, and filed as official record.

The above rules and regulations will become effective sixty days after publication.

The adoption and publication of a sanitary code governing the location and operation of beauty parlors was next considered. Dr. Windesheim moved that the following code of rules be adopted and ordered published. Motion seconded by Dr. Harper, and carried.

RULES OF THE WISCONSIN STATE BOARD OF HEALTH GOVERNING THE SANITARY REGULATION OF BEAUTY PARLOR SHOPS

In conformity with the authority vested in the State Board of Health by section 1636—27 of the Statutes, authorizing the board to adopt reasonable rules providing for the sanitary regulation of beauty parlor shops, the State Board of Health hereby adopts and publishes the following rules to be of general application throughout the state:

These rules were adopted by the Wisconsin State Board of Health on June 28, 1921, and were published in the official state paper on July 15, 1921. They have the full force of law.

Rule 1. The use of the beauty parlor as a living, dining or sleeping apartment is prohibited.

Rule 2. Floors, walls, furniture and other fixtures must be kept clean at all times. All bowls, basins, jars, etc., must be thoroughly cleaned at least once each day.

Rule 3. The location of a beauty parlor in a building occupied or frequented by persons of an immoral character is prohibited.

Rule 4. If a beauty parlor is located in a private residence, or in connection with some business, a separate room must be provided for beauty parlor work.

Rule 5. Every manager in charge of any beauty parlor must supply clean hot and cold water in such quantities as may be necessary to conduct said beauty parlor in a sanitary manner. Where running water and sewers are available connections must be made.

Rule 6. No owner or manager of a beauty parlor shop shall permit any person suffering from venereal or communicable disease to work in said shop.

Rule 7. No manager or employee shall undertake to treat any disease of the skin or scalp or hands unless under the direct supervision of a physician.

Rule 8. Every person employed in a beauty parlor shop shall use separate and clean towels for each patron and shall while serving said patron wear washable outer linen aprons, uniforms or coats which shall be kept clean.

Rule 9. No person employed in a beauty parlor shop shall use the head rest of any operating chair under their control unless the head rest is covered and which cover has been washed since last being used; or covered with a clean piece of paper toweling which must be renewed after each patron.

Rule 10. No employee of any beauty parlor shop shall massage any person when the surface to be massaged is inflamed or broken out, or contains pus, unless said person is provided with clean sterilized instruments and cups by the owner of the shop, and the same are properly sterilized and cared for afterwards.

Rule 11. Every person engaged in a beauty parlor must thoroughly cleanse their hands immediately before and after serving each patron.

Rule 12. No person engaged in a beauty parlor shop shall use lump alum or styptic pencil to stop the flow of blood. Liquid or powdered astringent must be used and applied with a clean sterilized gauze or cotton.

Rule 13. All cups, bowls, basins and instruments of any character used in direct contact with the skin must be thoroughly cleansed with hot water before used upon any patron, and subjected to a strong solution of sterilizing fluid, and then placed in a cabinet kept clean after sterilization has taken place.

Rule 14. Open powder boxes must not be used in a reception room for patrons, and the powder must be in shakers or similar receptacles.

Rule 15. After a towel has been used once it must be discarded until properly sterilized and laundered. Dipping towels in receptacles containing hot water and using same on a patron is insanitary and strictly forbidden. All used towels must be boiled at least ten minutes.

Rule 16. All instruments of whatsoever character used for direct contact upon a person must be sterilized by immersing in 50 per cent alcohol, 5 per cent carbolic acid, 20 per cent formaldehyde, 10 per cent lysol; or by boiling at least ten minutes after each separate use thereof.

Rule 17. All persons engaged in a beauty parlor must display license cards in a conspicuous place, preferably in the booth where such person is employed.

Rule 18. The owner or manager of any beauty parlor shop shall post a copy of these rules in a conspicuous place where they can be read by patrons.

Penalty. Section 1636—30. 14. Any person who shall act as manager of or operator or apprentice in any beauty parlor shop without having obtained a license as herein provided or any person who shall wilfully employ a beauty parlor manager, operator or apprentice, knowing that such person has not obtained a license, or any person who shall falsely pretend to be a licensed manager, operator or apprentice, or any person who shall violate any of the sanitary rules adopted by the board of health shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not less than ten dollars or more than one hundred dollars or by imprisonment in the county jail for not less than ten days nor more than ninety days, or by both such fine and imprisonment.

Published July 15, 1921.

Special Meeting August 12, 1921

Dr. Hoyt, the deputy for the Milwaukee district, appeared at the meeting of the board on invitation and suggested upon the recommendation of District Attorney Zabel of Milwaukee county, that the board issue a formal order on Mr. Jacob Landmann, who resides in the town of Milwaukee, in connection with a piggery nuisance which he is maintaining on his premises. After a full discussion the board adopted the following order which the state health officer was requested to serve on Mr. Landmann:

Whereas, Upon complaint and investigation, the State Board of Health is informed that you have and now maintain a nuisance upon your premises incident to the operation of a piggery upon the same, and

Whereas, Such nuisance being detrimental to the health, convenience and comfort of the public, we, the said Wisconsin State Board of

Health, pursuant to and by virtue of authority, order and direct that you, Jacob Landmann, abate such nuisance created by you and now existing upon the following described premises, to-wit: That certain piece and parcel of land owned and occupied by you and described as "the south two acres of that part of the west forty-eight and twelve hundredths acres of the south one-half of the northeast quarter which lies east of the Green Bay road" lying and being situated in the township of Milwaukee, county of Milwaukee, state of Wisconsin, known and described as the northeast quarter of Section 30, Township 8, Range 22, East.

And it is further ordered that you abate such nuisance within ten days from and after the date hereof and that failing so to do, you are hereby notified that action will be brought by the Wisconsin State Board of Health pursuant to law and authority under Section 1407a—6, Subsection 11 of the statutes.

The nomination of a person to serve on the Milwaukee County Sewerage Commission was next considered. The state health officer explained that C. B. Perry of Wauwatosa has been suggested for this nomination, and it appears from information available that both the Milwaukee county parties and the city of Milwaukee are agreeable to this appointment. Dr. Fiedler then moved that Mr. C. B. Perry of Wauwatosa be nominated to represent the State Board of Health on this commission. This motion was seconded by Dr. Hayes and carried. Dr. Fiedler then moved that if for any reason Mr. Perry is not appointed to the position, the board recommend Mr. Baer of Wauwatosa as an alternate. This motion was seconded by Dr. Steffen and carried.

Certain amendments to the joint regulations adopted by the State Board of Health and the Industrial Commission relative to toilet facilities in public buildings were then taken up. Dr. Steffen then moved that the following amendments to these regulations be adopted and ordered published:

Section (Order) 5260. Urinals. Urinals shall be made of material impervious to moisture and of such design, materials and construction that they may be properly flushed and kept in a sanitary condition.

In all new installations in schools, theaters, hotels, office buildings, mercantile buildings, libraries and museums, or similar public buildings, only individual urinals shall be used. Such individual urinals shall be of porcelain or vitreous china, set into the floor, the floor graded towards the urinal and shall be equipped with an effective automatic tank or satisfactory foot operating flushing device.

This order shall be enforced on all new urinal installations after July 1, 1922.

This motion was seconded by Dr. Harper, and carried.

Regular Annual Meeting January 12, 1922

Dr. Windesheim reported to the board that the Kenosha laboratory is experiencing a great deal of difficulty in obtaining a sufficient quantity of alcohol for laboratory use, particularly absolute alcohol After

some discussion Dr. Windesheim introduced the following resolution:

Resolved, That the State Board of Health, having its principal office in the state capitol at Madison, Wisconsin, does hereby authorize and empower C. A. Harper, the state health officer, for and on behalf of said State Board of Health, to execute an application, Form 1445, without bond, required to be filed by said State Board of Health to the United States of America for the use of alcohol, free of tax, under Title 111 of the National Prohibition Act, and in accordance with all the requirements of the regulations issued pursuant thereto respecting the withdrawal, transportation and use of tax-free alcohol.

Dr. Windesheim then moved that this resolution be adopted and ordered spread on the minutes of the board meeting. This motion was seconded by Dr. Hayes, and carried.

The essential provisions of the Federal Sheppard-Towner law were next discussed and the amount of state aid made available under provisions of this law was also discussed. Dr. Harper moved that it is the sense of the State Board of Health, in regular annual meeting assembled, a quorum being present, that the provisions of the Sheppard-Towner bill be accepted by the State Board of Health and every effort be put forth by the board in cooperating with the Federal authorities to the end that we may be able to reduce to the lowest possible level the number of deaths occurring in Wisconsin each year among children and young mothers due to natal and pre-natal causes. This motion was seconded by Dr. Steffen and carried.

The new personnel required by the State Bureau of Child Welfare and Public Health Nursing, in addition to the employment of Dr. Horner and Miss Mead was discussed and the state health officer was authorized to employ such additional personnel as may be required subject to the approval of the board at a subsequent meeting. It was the general opinion of the members that one additional lady physician should be employed to assist with the establishment and operation of local health centers. The question of offering a state subsidy to encourage local political units to employ additional child welfare workers, such money to be paid out of the fund appropriated by the legislature for child welfare work and the money available under the Sheppard-Towner bill, was discussed at length but no formal action was taken. The policy of starting a mandamus action to compel counties to employ at least one county public health nurse or public health instructor and the action, if any, to be taken by the board in compelling cities and incorporated villages to establish and maintain comfort stations for both sexes was fully discussed. The board voted unanimously not to start a mandamus action on its own initiative in connection with the enforcement of either of these laws except as a last resort.

The policy to be pursued by the board in expending the money made available under the provisions of sec. 20.43—15 of the statutes, providing for the supervision by the board of the location, construction and operation of public comfort stations was next taken up. After a full discussion Dr. Hayes moved that the state health officer

be directed to arrange a plan for the expenditure of the comfort station fund, using the present personnel now doing this work. The motion was seconded by Dr. Windesheim and carried.

The Fess-Capper bill now pending before Congress, providing a nation-wide fund for the physical education of school children, was discussed and the board voted unanimously to endorse the provisions of this bill or any similar bill which will encourage the physical education of our school children. A motion to endorse the provisions of this bill was made by Dr. Hayes, seconded by Dr. Harper, and carried.

Amendments to the rules previously adopted by the board, relating to the Sanitary Care of Schools, were then taken up. After a full discussion Dr. Steffen moved that the following amendments to the school rules be adopted and ordered published. This motion was seconded by Dr. Richards, and carried:

RULES OF STATE BOARD OF HEALTH RELATING TO THE SANITARY CARE OF SCHOOLS

These rules were officially adopted by the state board of health on January 12, 1922, and published in the official paper on January 30, 1922. Under the provisions of section 1408, Wisconsin Statutes, these rules have the full force of law.

Rule 17. **Attendance at School, When Prohibited.** All teachers, school authorities and health officers having jurisdiction shall not permit the attendance in any private, parochial or public school of any pupil afflicted with a severe cough, a severe cold, itch, lice or other vermin, or any contagious skin disease, or who is filthy in body or clothing, or who has any of the following dangerous, contagious or infectious diseases, to-wit: Diphtheria, smallpox, scarlet fever, measles, including German measles, whooping cough, chickenpox, mumps, pulmonary tuberculosis, Asiatic cholera, (cholerine), yellow fever, typhus fever, bubonic plague, cerebrospinal meningitis, influenza (Lagrippe), or acute anterior poliomyelitis. The teachers in all schools shall, without delay, send home any pupil who is obviously sick even if the ailment is unknown, and said teacher shall inform the parents or guardians of said pupil and also the local health officer as speedily as possible, and said health officer shall examine into the case and take such action as is reasonable and necessary for the benefit of the pupils and to prevent the spread of infection.

Rule 18. **Duty of Parents.** Parents, guardians or other persons having control of any child who is sick in any way, or who is afflicted with any disease listed in Rule 17, shall not permit said child to attend any public, private or parochial school or to be present in any public place.

Rule 19. **Duty of Teachers, Etc.** School-teachers, pupils or other persons shall not be admitted to any public, private or parochial school who have come from, or who reside in any house or building which harbors or is infested with Asiatic cholera (cholerine), yellow fever, typhus fever, bubonic plague, diphtheria, (membraneous croup), scarlet fever (scarlatina), measles (See exceptions), cere-

brospinal meningitis, influenza (Lagrippe) or acute anterior poliomyelitis.

Children who have had measles may attend school. Well children in the family who have not had measles may return to school after fourteen days from date of the last exposure provided they take up their residence in another home. Children who have measles are not permitted to leave the premises, and all children other than members of the family shall not enter or remain upon the premises while the home is placarded.

Rule 20. **Water Supply—General.** (a) Every school, either private or public, must be adequately supplied with pure drinking water and every school board must guard carefully the drinking and washing water supply in connection with the school maintained by them. Special attention must be given in cases where the supply is derived from a course other than a public waterworks.

Water may be supplied and dispensed by means of:

1. Well and pump with individual cups.
2. Water faucets, with individual cups.
3. Sanitary flowing drinking fountains.
4. Portable fountains with bubbler or individual cups.

(b) **Source of Water Supply.** No water supply serving a school building shall come from a well or spring situated within apparent danger of pollution.

(c) **Shallow Wells and Springs.** Shallow wells or springs shall be so located as not to be subject to pollution from privy vaults, sewage disposal systems, surface or underground drains or other dangerous sources.

(d) **Location of Privies or Sewage Disposal Systems with Respect to Water Supply.** Privy vaults of the leaching type, dry wells, leaching basins, etc. shall, where possible, be located at least 150 feet from any adjacent well or spring.

(e) **Location of Water-tight Vaults.** Water-tight vaults shall be located at least 20 feet from any cistern or 40 feet from any well, spring or other source of water supply used for drinking or washing purposes. No abandoned well or other water supply shall be used as a privy, dry well or medium for the disposal of raw or treated sewage.

(f) **Location of Well and Drainage.** The school well shall be located on high ground a safe distance from all sources of possible pollution. The surface of surrounding ground shall be made to drain from the well in all directions; waste water or drippings from pumps or other appliances shall be collected in a suitable receiver and conveyed a safe distance from the well to an adequate drain.

(g) **Protection of Wells.** The tops of the wells or springs from which water is obtained for school use shall be provided with a concrete, water-tight cover or so constructed as to exclude all surface water.

(h) **Pump.** The pump when placed directly over the well shall be attached directly to the well casing in drilled wells, and to the platform in dug wells, in such manner as to insure a water-tight joint. Pumps located in pits over the well or within buildings shall have the suction, intake or delivery pipes so extended into the well or spring that they cannot become a factor in the pollution of the water supply.

(i) All school wells that have not been used during the vacation months shall be pumped out sufficiently to remove the stagnant water before school opens.

(j) Where drinking water is not available on the school premises and the water is carried any great distance, clean covered containers shall be provided. The school board shall make all necessary arrangements for furnishing a sufficient supply of pure drinking water and also water for washing in cases where there is no water supply on the school grounds or where the water supply on the school property is dangerously polluted.

(k) **Drinking Devices.** All bubblers and drinking devices shall be of approved sanitary design and construction. Water pressure and volume shall be such that the drinker may obtain a drink without the lips coming in contact with the bubbler head or orifice. No fountain, bubbler or device shall be maintained that is an apparent transmitter of disease. Where running water is not available, portable fountains of approved design or individual sanitary cups shall be used.

Rule 21. **Heating.** It shall be unlawful for any school board, board of school directors, board of education, or other school officials of Wisconsin, to use a common heating stove for the purpose of heating any schoolroom, unless each such stove shall be in part enclosed within a shield or jacket made of galvanized iron or other suitable material and of such height and so placed as to protect all pupils while seated at their desks from direct rays of heat.

Rule 22. The State Health Officers, Deputy State Health Officers and Local Health Officers shall enforce these rules and promptly enter prosecution for any violation thereof.

Rule 23. The rules and regulations adopted by the State board of Health on January 29, 1913, and published in the official state paper on May 30, 1913, are hereby repealed.

The board then took up the expenditures made from the venereal disease fund for the purchase of arsphenamine in the treatment of syphilis. The question of the advisability of the state manufacturing this product was mentioned but the board took the position that with the present favorable prices at which this material can be purchased, it would not advise the establishment of a state plant for the manufacture of arsphenamine or other similar products unless they can be furnished to the people of the state at a price lower than is now paid or a superior product furnished at a reasonable price.

The suggestion made by Dr. Stovall that the board make provision as soon as possible for the employment of an additional laboratory worker to be sent around to the various branch and cooperative laboratories so that the directors of these laboratories can do some two weeks or more of work in the state laboratory each year was discussed. Dr. Windesheim moved that the board make arrangements as soon as possible to employ one additional laboratory worker for this purpose, this person to work under the direction and supervision of Dr. Stovall. The motion was seconded by Dr. Hayes and carried.

Dr. Stovall's other suggestion relative to the supervision of private laboratories doing examinations which are of a public health nature

was also fully discussed. Dr. Harper moved that provision be made at the earliest possible date for a system of accrediting these private laboratories and that such laboratories must meet the requirements laid down by the State Board of Health before they are to be accredited. This motion was seconded by Dr. Windesheim and carried.

Amendments to rules for the prevention and control of scarlet fever were then taken up. After a full discussion it was moved by Dr. Harper, seconded by Dr. Richards and carried, that the minimum quarantine for scarlet fever be made 28 days or as much longer as the severity of the case demands.

The situation relative to the constitutionality of the new embalmers' law, chapter 464, laws of 1921, was then taken up. The records in the office show that a considerable number of applications are on file from people who are admirably qualified for a license either under the new law or under the old law. It appears further that there has been a great deal of unnecessary delay in getting the case before the Supreme Court. It was therefore moved by Dr. Harper that as soon as the Circuit Court for Dane county shall render an opinion on the provisions of Chapter 464, laws of 1921, the state health officer shall take action immediately either to issue licenses under the waiver act or to hold an examination for those who are eligible under the old law. This motion was seconded by Dr. Whyte and carried.

Special Meeting April 26, 1922

The state health officer reviewed with the board the correspondence he has had with Dr. Rock Sleyster, of Wauwatosa, regarding state medicine and the proper conduct of health clinics, health centers and other allied activities. After a full discussion Dr. Fiedler introduced the following resolution:

Whereas, the conservation and promotion of public health is the object of the State Department of Health, and

Whereas, the public is constantly increasing its interest in and support of a comprehensive program to this end, and

Whereas, a definite general policy in public health administration activities is desirable, therefore be it

Resolved, that the State Department of Health of Wisconsin endorses the policy of continuing and extending the educational program toward the prevention of disease and toward informing the public in fundamental health subjects; that it welcomes and needs the cooperation of scientific and educated practitioners; that it is interested in warning the public to discriminate against the dangerous, incompetent and unqualified practitioners, whose unsound and unscientific methods of practice exploit sickness for commercial gain;

That the primary function of the State Department of Health being educational and preventive, the actual treatment of disease is not a function of public officials now to be provided from public funds except in the

(a) Institutional care of the wards of the state, delinquent, diseased and defective;

(b) The treatment of the indigent;

(c) The treatment of those whose treatment is directly essential to prevention; and

(d) The inspection, recognition and recommending the correction of common defects of school children and children of pre-school age as a primary feature in health education.

And that otherwise in the holding of public clinics and health centers under the auspices of public health officials, they shall be so conducted that the purpose shall be purely educational and diagnostic.

It was also voted to incorporate the letter of the state health officer to Dr. Rock Sleyster, secretary of the Wisconsin State Medical Society, in reply to a letter received from Dr. Sleyster outlining the attitude of the board toward the question of so-called "State Medicine" and the further development of public health activities in this state.

Dr. Fiedler then moved that his resolution be adopted and spread on the minutes of the board meeting. The motion was seconded by Dr. Windesheim and carried.

The question of new legislation to be introduced at the 1923 session was next considered. The financial statement showing the balance in the various funds on April 1, 1922, shows that all of the funds are ample to meet the demands made upon them for the present fiscal year with the exception of the fund for the Bureau of Sanitary Engineering and the Laboratory Fund. It was agreed by the board that the next legislature should be asked to increase the Sanitary Engineering Fund from $10,000 per year to $20,000 per year. The members voted to recommend an increase of $500.00 per year for the laboratories and to ask that subsection (a) of section 20.43—3 of the statutes be amended so as to authorize the expenditure of a sum not to exceed $2,500 per year for equipping and operating the State Branch Laboratory of Rhinelander.

Dr. Fiedler asked the board to go on record as favoring a revision of the Medical Practice Act in order to prohibit incompetent persons from treating the sick and in this way better conserve our vital resources. It was the unanimous opinion of the members present that the board should do everything in its power to aid in this work.

Dr. Windesheim asked that the board approve the enactment of a law empowering the health officer to placard any house or building used for human habitation as being insanitary and prohibit its use for residence purposes. The board approved the enactment of such a law.

The work of the Bureau of Child Welfare and Public Health Nursing was then taken up and the plans for carrying on this work, as submitted by Mrs. Morgan, the director of the bureau, were discussed. It was pointed out that we have a state appropriation for this work of $31,100 per year for the present fiscal year and $21,100 for the fiscal year ending June 30, 1923. In addition to these state funds for

the promotion of welfare and hygiene of maternity and infancy, it is expected that there will be available from the federal government under the provisions of the Sheppard-Towner bill approximately $23,000 per year in addition to the state appropriation.

An outline of the plan to provide local health centers in addition to the child welfare truck which is now out in the rural districts was then taken up and the board was asked to outline a policy to be pursued in the establishment of these health centers. The board voted to authorize the establishment of a sufficient number of health centers to cover as much of the state as possible so long as proper supervision can be maintained. In discussing the question as to whether these health centers should be supervised entirely by full-time physicians employed by the board or by practicing physicians who are especially skilled in obstetrics and maternal care who will work on a part-time basis, the board voted to recommend the employment of physicians not residents of the town where the health center is located, who are especially skilled in this work, to visit the centers. The board considered this plan more economical and one more apt to secure the cooperation of the practicing physicians than the employment of all full-time physicians who will take charge of the general supervisory work. It was agreed, however, that one or more full-time lady physicians, who are especially skilled in obstetrics and maternal care, should be employed to exercise under the direction of the board general supervision of health centers located in various sections of the state.

Regular Semiannual Meeting, June 23, 1922

The special committee, appointed at the January meeting to revise the rule relating to the prevention and control of diphtheria presented a report which was then taken up and fully discussed. Upon motion of Dr. Steffen, which was seconded by Dr. Richards and carried, the diphtheria rule was amended to read as follows:

DIPHTHERIA RULE

Patient:

1. Quarantine for patient at least ten days from time case is reported to health officer, and thereafter until two cultures from both the nose and throat, taken not less than twenty-four hours apart, are negative to diphtheria bacilli, and person, clothing and home have been disinfected.

Contacts:

1. Members of family and persons in the home with the patient who desire to leave the home, or in cases where patient is removed to an isolation hospital, must be quarantined until one culture from both the nose and throat shows the absence of diphtheria bacilli, and until the person and clothing have been disinfected. In cases where patient is removed to an isolation hospital or elsewhere, the home must be disinfected before quarantine is removed. Such persons must not have come in contact with patient after culture is taken.

2. Persons remaining in the home with the patient must remain in quarantine until a culture from both the nose and the throat is negative to diphtheria bacilli, and persons and clothing have been disinfected. Release cultures for well members of family shall not be taken until one negative release culture has been obtained from patient.

3. Children in the family with the patient may return to school after taking up their residence elsewhere for five days and obtaining cultures from both the nose and throat which are negative to diphtheria bacilli, the first culture to be taken at the time of removal from the home where the patient is quarantined, the second culture to be taken not earlier than the fourth day after removal from the house where the patient is quarantined. Children coming under this rule may be removed from the house immediately upon the diagnosis of diphtheria without waiting for the first negative swab, provided the child is removed to a family where there are no children and that a swab is taken at the time the child leaves the house.

4. Contacts not in the home with the patient must be cultured for diphtheria bacilli, and if found positive must be quarantined according to the rules for patients or treated as carriers, as the case may be.

Carriers:

1. By the term "carriers" is meant all individuals who, although apparently well, harbor diphtheria bacilli in the nose or throat or both. All carriers must remain under quarantine for five days and thereafter until two successive cultures from both the nose and throat, taken not less than twenty-four hours apart, are negative to diphtheria bacilli and after disinfection of person, clothing and premises.

Exceptions to the above quarantine rule can be made in that class of carriers who have not been exposed to a clinical case of diphtheria or have no history of recent sore throat or other indisposition, and also in those persons who have been in quarantine for a period of five weeks since the first terminal culture and are still positive. These may be isolated upon the premises, such isolation to consist of having a separate room, separate meals and separate or sterilized eating utensils and no association with others of the household. All other members of the family are to receive a negative test of the nose and throat at the beginning and the end of the isolation of the patient, but shall not be confined at home or away from their vocations or from school after the first negative test. Failure to follow the above requirements shall result in quarantine.

In cases which for any reason it is impossible to obtain release cultures the period of quarantine shall be six weeks from the date on which the disease is reported to the health officer.

The state health officer then presented to the board the outline of a plan to make a motion picture film for use in our child welfare work and also to use in our educational campaign a film which we are now preparing, showing the tremendous cost to the state of our public institutions and indicating how this expense can be largely eliminated through the prevention of infantile blindness, the physical examination of school children to remove physical defects and the use of other preventive measures together with an enlarged educational campaign along health lines. The inmates of the State School for the Blind, the School for the Deaf, the School for Dependent and Neglected Children at Sparta, and perhaps some other state and county institutions, will be used in the preparation of this educational

film. The board fully endorsed this work and agreed that every possible effort should be put forth to extend our educational work.

The question of reporting outbreaks of epidemic jaundice was taken up. The records show that we have recently had several outbreaks of this disease in various parts of the state, but that so far as can be determined there have been no fatalities. The board did not consider it wise at this time to require physicians and health officers to report individual cases, but health officers should be urged to notify the board of any unusual outbreak so that we can have our epidemiologists make a careful study of this condition.

The prevalence of trachoma in the state was then considered. It appears from the reports by the U. S. Public Health Service that trachoma is unusually prevalent among our Indian population. In order to prevent the infection of the white population the board voted to ask the federal government to require a health certificate for all Indians who are about to become citizens.

EXPENDITURES OF THE STATE BOARD OF HEALTH AND BUREAU OF VITAL STATISTICS

From July 1, 1920 to June 30, 1921

Month	Salaries	Official Expenses	Per Diem	Miscellaneous	Printing and Paper
July	$ 2,854.57	$ 626.83	.....	.....	$341.73
August	2,967.35	506.62	.....	.....	295.56
September	2,965.56	449.64	$40.00	$ 31.00	51.87
October	2,963.30	1,163.69	.....	144.31	461.02
November	2,997.17	704.44	.....	393.54	355.30
December	2,998.30	415.72	.....	.....	189.40
January	3,008.30	461.29	10.00	.....	617.98
February	2,925.78	577.41	60.00	.....	50.01
March	2,854.97	428.17	.....	1.50	260.49
April	2,621.65	452.04	10.00	71.02	431.82
May	2,771.65	308.10	.....	5.00	.....
June	2,815.15	798.78	70.00	.....	340.53
Total	$34,743.75	$6,892.73	$190.00	$646.37	$3,395.71

Statements Furnished for the Following by the Superintendent of Public Property

Month	Express, Freight and Dray	Telephone and Telegraph	Stationery and Office Supplies	Postage	Miscellaneous
July	$51.51	$16.30	$ 19.23	$ 53.79	$ 66.80
August	47.17	35.22	39.81	127.10	147.86
September	40.98	6.00	23.96	469.00	87.39
October	42.38	52.78	109.29	206.78	54.59
November	35.09	32.89	18.40	136.56	127.22
December	32.76	26.67	274.98	173.53	65.25
January	12.79	54.41	12.87	58.06	87.67
February	16.80	17.65	141.34	60.35	32.33
March	64.53	31.42	80.95	111.06	100.59
April	24.83	79.68	58.94	154.66	83.45
May	22.93	37.26	61.84	69.80	254.42
June	36.70	21.40	23.82	108.56	95.71
Total	$428.47	$411.68	$865.43	$1,729.25	$1,203.28

Total paid by vouchers $45,868.56
Total paid per statements 4,638.11

Grand total expenditures from July 1, 1920 to June 30, 1921 ..... $50,506.67

From July 1, 1921 to June 30, 1922

Month	Salaries	Official Expenses	Per Diem	Miscellaneous	Printing and Paper
July	$2,749.16	$779.35	$20.00	.....	$102.36
August	2,807.06	588.01	70.00	.....	417.69
September	2,791.66	587.78	20.00	$ 20.00	932.15
October	2,743.58	617.31	.....	.....	4.86
November	2,833.96	703.47	.....	.....	797.12
December	2,891.66	605.49	.....	.....	534.19
January	2,893.43	456.78	.....	98.61	374.82
February	2,757.10	546.65	.....	100.73	392.24
March	2,671.66	391.42	.....	112.43	2,982.28
April	2,811.66	340.24	.....	88.11	54.77
May	3,475.66	918.80	.....	100.65	573.11
June	3,148.72	556.31	.....	62.70	143.37
Total	$34,581.31	$7,091.61	$110.00	$583.23	$7,308.96

Statements Furnished for the Following by the Superintendent of Public Property

Month	Express, Freight and Dray	Telephone and Telegraph	Stationery and Office Supplies	Postage	Miscellaneous
July	$ 64.82	$ 52.02	$ 50.62	$ 147.77	$ 121.44
August	21.91	31.54	21.58	115.00	112.65
September	39.16	57.92	13.91	72.21	97.96
October	71.41	92.97	10.40	849.50	84.18
November	63.33	34.54	11.35	34.26	87.46
December	43.19	29.75	22.58	65.00	54.86
January	16.81	64.50	94.18	40.00	93.61
February	19.24	17.49	17.00	100.00	94.73
March	28.03	34.47	34.41	112.88	49.92
April	33.08	68.84	31.48	148.57	88.11
May	43.43	27.23	16.59	276.32	91.30
June	67.64	85.15	121.97	90.00	185.77
Total	$512.05	$596.42	$446.07	$2,087.51	$1,161.99

Total paid by vouchers $49,675.11
Total paid by statements 4,804.04
Grand total expenditures from July 1, 1920 to June 30, 1921 ..... $54,479.15

COMMUNICABLE DISEASES

The proper care of the communicable diseases of the state is and has been a dominant function of the State Board of Health since its organization. One of the prime motives of organizing boards of health in the various districts was for the control of dangerous and pestilential diseases. With the discoveries and advances in the knowledge of the origin and modes of existence of germ life, and with the elaboration of tests for the various bacteria, public health work has taken on added functions, and with the quarantining and placarding of additional diseases to which no attention was formerly paid, the work has become more progressive and time-taking. For the purpose of taking care of the increasing duties the Bureau of Communicable Diseases was established in 1919, and the present arrangement for the control of communicable diseases is as follows:

Organization For the Control Of Communicable Diseases

State Health Officer	Dr. C. A. Harper
Acting Director Bureau of Communicable Diseases	Dr. Robt. Olesen, U. S. P. H. S. Surgeon
Epidemiologists	Dr. I. F. Thompson—1921 Dr. H. M. Guilford—1921
Deputy State Health Officers	Dr. Geo. Hoyt, Menomonee Falls Dr. L. E. Spencer, Wausau Dr. Louis Dorpat, Rhinelander Dr. G. W. Henika—1920—Madison Dr. Frank Bowman — 1921 — Madison Dr. V. A. Gudex—1920—Eau Claire Dr. H. B. Sears—1921—Eau Claire

Local Health Officers—These number approximately 1,785.

The local health officers and deputy state health officers are engaged in other forms of public health work besides communicable diseases. The deputy state health officers are responsible to the State Health Officer for the details of their work.

Methods of Procedure

A physician attending a case of communicable disease must report it to the local health officer. It is the legal obligation of any person who knows of an unreported case to do the same. It is the duty of the health officer to follow legal requirements in the protection of the community and to report all cases in his district to the State Board of Health. This is done each week upon a franked card furnished by the central office.

In case of an unusual outbreak the health officer must inform the State Board of Health promptly by telegram or otherwise.

The State Board of Health in turn sends out to each deputy state health officer a weekly detailed report of all cases reported to the central office in that deputy's district. The county nurses receive a like report for their respective counties and are a distinct aid in preventative work. A prevalence of disease in a locality is a signal for a visit from the deputy state health officer and an unusual outbreak may be visited by an epidemiologist.

The local health officer can receive help when he needs it. By means of questionnaires and by the aid of the deputy state health officers the State Board of Health is endeavoring to see that each township lives up to the law and has a legally qualified health officer ready for such work as may be placed upon him.

Assistant Collaborating Epidemiologists

The United States Public Health Service has allowed all health officers in cities and villages of 750 population or over to be made assistant collaborating epidemiologists and thus obtain the franking privilege of the government.

Summaries of Communicable Diseases

In Tables 1 and 2 are given the number of cases of communicable diseases notified by local health officers and the number of deaths from the same causes reported by the local registrars during the calendar years 1920 and 1921. These figures are made available for each county in the state affording in this way a basis for comparative study.

TABLE I—NUMBER OF REPORTED CASES AND REGISTERED DEATHS FROM COMMUNICABLE DISEASES IN WISCONSIN DURING 1920

	Diphtheria		Typhoid Fever		Whooping Cough		Smallpox		Scarlet Fever		Measles		Tuberculosis		Meningitis		Acute Anterior Poliomyelitis		Ophthalmia Neonatorum		Chickenpox		Influenza	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Adams	7	....	....	....	2	....	29	....	49	1	10	1	5	4	....	1	....	....	....	....	....	....	60	5
Ashland	8	5	2	4	7	9	20	....	15	4	55	1	18	36	....	5	....	....	....	....	19	....	174	36
Barron	11	....	2	1	112	5	67	....	66	6	20	....	8	17	....	5	2	1	....	....	9	....	218	23
Bayfield	14	2	2	1	10	7	26	....	14	....	42	2	11	12	....	1	3	....	....	....	5	....	213	4
Brown	53	7	2	....	68	14	316	3	110	11	117	6	15	70	5	4	1	1	1	....	34	....	312	30
Buffalo	1	2	1	....	8	2	17	....	9	....	3	....	2	5	....	....	1	....	....	....	6	....	130	7
Burnett	6	....	....	....	39	1	14	....	63	5	86	1	2	8	....	1	....	....	....	....	6	....	292	6
Calumet	5	....	....	....	36	1	231	....	17	1	109	1	1	8	....	3	....	....	....	....	8	....	288	20
Chippewa	85	9	1	....	57	5	41	....	28	2	146	2	49	36	3	6	5	....	....	....	26	....	789	75
Clark	24	2	5	....	41	2	83	....	8	1	75	2	2	14	1	....	3	....	....	....	12	....	329	31
Columbia	19	....	5	....	30	....	14	....	65	2	103	1	6	24	....	....	1	1	....	....	40	....	621	24
Crawford	1	....	5	....	37	2	35	....	30	2	151	....	6	13	....	....	....	....	....	....	20	....	426	12
Dane	61	6	6	....	152	10	162	....	116	....	391	1	34	67	1	4	1	....	....	....	149	....	1,534	76
Dodge	25	5	4	....	131	11	139	....	60	1	152	3	17	30	....	3	....	....	....	....	44	....	794	31
Door	1	1	4	....	5	1	233	....	52	3	2	....	2	4	....	1	....	....	....	....	8	....	30	4
Douglas	99	13	20	1	48	13	302	....	137	12	389	10	77	40	1	4	1	....	....	....	43	....	18	39
Dunn	10	1	....	1	33	3	26	....	28	....	99	2	6	11	1	2	1	....	1	....	12	....	679	22
Eau Claire	36	5	3	....	153	3	40	....	97	6	300	1	14	52	4	4	3	1	....	....	43	....	174	40
Florence	3	2	....	....	....	....	1	....	11	....	50	2	....	2	....	....	....	....	....	....	....	....	2	....
Fond du Lac	148	13	5	1	87	6	171	....	70	2	463	3	13	41	1	1	5	2	1	....	44	....	1,253	49
Forest	5	3	2	....	143	4	13	....	41	1	21	....	3	6	2	....	....	....	....	....	4	....	578	8
Grant	7	2	4	1	148	5	94	....	131	....	102	....	13	30	2	2	1	....	....	....	85	....	1,053	31
Green	10	1	....	....	45	....	79	....	48	....	363	3	5	13	....	2	2	....	....	....	33	....	806	23
Green Lake	3	....	2	....	47	1	1	....	12	1	139	1	6	5	....	1	....	....	....	....	4	....	189	9
Iowa	2	1	4	1	38	....	12	....	14	1	13	1	22	17	....	1	....	....	....	....	13	....	483	17
Iron	3	1	1	....	16	2	44	....	18	....	18	1	4	6	....	....	....	....	....	....	2	....	267	7
Jackson	34	4	....	....	2	....	48	....	17	2	16	....	9	7	....	2	3	....	....	....	7	....	1,182	27
Jefferson	17	2	2	....	79	1	13	....	24	2	182	....	18	30	....	1	....	....	....	....	27	....	883	29
Juneau	15	1	2	....	29	....	13	....	15	....	62	....	5	12	....	....	....	....	....	....	12	....	712	21

TABLE I.—NUMBER OF REPORTED CASES AND REGISTERED DEATHS FROM COMMUNICABLE DISEASES IN WISCONSIN DURING 1920.

	Diphtheria		Typhoid Fever		Whooping Cough		Smallpox		Scarlet Fever		Measles		Tuberculosis		Meningitis		Acute Anterior Poliomyelitis		Ophthalmia Neonatorum		Chickenpox		Influenza	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Kenosha	68	7	11	2	506	12	170	....	111	3	257	4	8	36	....	....	....	....	....	....	120	....	876	61
Kewaunee	1	....	8	1	2	1	103	1	115	8	92	1	5	13	....	....	....	....	....	....	7	....	71	5
La Crosse	22	2	1	....	28	2	113	1	32	....	508	5	10	63	1	6	8	....	....	....	65	....	814	29
Lafayette	10	....	2	....	35	2	33	1	44	1	20	....	1	6	....	1	....	....	....	....	5	....	531	15
Langlade	4	4	5	....	2	....	37	....	106	8	146	1	....	8	....	1	....	....	....	....	8	....	172	13
Lincoln	22	2	3	....	76	....	57	....	20	....	296	7	24	9	....	1	....	....	....	....	28	....	381	13
Manitowoc	33	4	11	3	87	10	145	....	294	16	125	3	31	47	3	2	1	....	....	....	55	....	971	37
Marathon	16	6	9	1	183	10	135	....	189	5	721	11	24	38	3	5	2	....	....	....	73	....	1,068	44
Marinette	11	2	3	....	73	5	84	....	52	3	51	1	20	25	....	....	4	1	....	....	19	....	676	33
Marquette	1	1	....	....	2	....	21	....	8	....	42	....	5	2	....	....	....	....	....	....	....	....	91	3
Milwaukee	1,659	160	36	15	2,011	75	636	....	1,397	35	6,195	65	890	673	67	34	9	1	....	1	1,412	....	2,838	332
Monroe	17	1	1	....	28	2	20	....	69	3	20	1	20	12	....	4	....	....	....	....	41	....	345	23
Oconto	3	1	....	....	15	1	173	....	56	3	100	....	7	20	....	....	1	1	....	....	19	....	412	29
Oneida	2	....	1	1	70	4	41	....	35	2	168	2	3	11	....	1	....	....	1	....	21	....	107	11
Outagamie	41	4	5	2	11	2	273	1	169	5	433	5	18	65	3	7	....	....	....	....	20	....	736	50
Ozaukee	3	....	1	....	41	3	20	....	20	3	36	1	3	10	....	2	....	....	....	....	....	....	68	14
Pepin	3	1	....	....	25	....	16	....	....	....	84	1	2	6	....	....	....	....	....	....	....	....	211	5
Pierce	17	3	2	1	....	....	15	....	6	....	129	1	6	12	....	....	....	....	1	....	16	....	553	10
Polk	35	3	3	....	16	1	38	....	44	2	71	1	4	8	2	3	....	....	....	....	26	....	636	22
Portage	20	3	13	2	59	8	46	....	45	1	230	3	7	34	1	1	....	1	....	....	32	....	497	33
Price	23	2	3	1	9	....	37	....	....	....	61	2	8	2	....	....	2	....	....	....	35	....	269	8
Racine	317	27	5	4	88	8	60	....	360	21	726	7	42	61	2	5	....	....	....	....	120	....	729	114
Richland	4	....	2	....	219	5	22	....	2	....	*27	....	10	3	....	....	....	....	1	....	16	....	905	18
Rock	48	4	11	1	142	6	107	....	247	6	1,150	10	37	69	2	3	3	1	1	....	266	....	847	90
Rusk	2	....	3	1	71	1	8	....	39	3	7	2	....	6	....	2	....	....	....	....	....	....	98	16
St. Croix	92	11	3	1	4	....	76	....	11	....	255	1	8	15	1	2	2	1	....	....	22	....	455	12
Sauk	27	3	1	....	70	3	6	....	38	1	427	....	14	15	....	1	....	....	....	....	37	....	796	30
Sawyer	9	3	....	....	43	4	14	....	31	1	16	....	4	2	....	....	1	....	2	....	10	....	193	6

Shawano	9	1	4	1	48	8	88	....	85	2	202	4	6	34	....	1	....	....	....	....	42	....	240	14
Sheboygan	56	14	19	5	35	2	265	....	220	20	520	7	12	43	1	3	1	....	....	....	54	....	968	45
Taylor	12	5	1	....	17	1	25	....	14	4	17	....	3	2	....	....	....	....	....	....	3	....	135	13
Trempealeau	5	....	1	....	70	....	12	....	3	....	108	4	8	19	2	2	1	....	....	....	19	....	884	33
Vernon	5	1	8	4	111	1	27	1	49	2	81	1	7	2[illegible]	1	1	3	....	....	....	37	....	1,348	28
Vilas	....	....	....	....	....	2	4	....	9	....	9	1	2	4	....	....	....	....	....	....	....	....	....	6
Walworth	17	....	5	1	76	....	12	....	109	....	235	1	23	12	....	2	....	....	....	....	61	....	643	21
Washburn	24	3	....	....	27	1	8	....	27	1	46	....	5	2	....	....	....	....	....	....	48	....	219	7
Washington	13	1	6	2	80	2	56	....	19	....	225	4	14	21	....	1	4	1	....	....	33	....	200	10
Waukesha	45	6	4	1	121	1	5	....	71	8	303	4	54	88	1	....	1	....	....	....	76	....	714	45
Waupaca	29	3	....	....	33	1	123	....	85	10	401	1	9	20	....	....	1	3	....	....	19	....	207	11
Waushara	1	....	1	....	3	1	15	....	33	1	25	....	6	8	1	1	1	....	....	....	27	....	301	6
Winnebago	27	1	35	9	66	2	110	....	90	4	872	13	37	61	2	4	....	....	1	....	38	....	881	52
Wood	19	2	2	....	3	....	128	1	103	4	43	1	4	18	1	1	6	....	....	....	26	....	375	34
Total	3,485	379	313	70	6,209	295	5,668	9	5,822	252	19,159	221	1,774	2,243	115	151	84	16	10	1	3,671	....	37,950	2,107

TABLE II.—NUMBER OF REPORTED CASES AND REGISTERED DEATHS FROM COMMUNICABLE DISEASES IN WISCONSIN DURING 1921.

	Diphtheria		Typhoid Fever		Whooping Cough		Smallpox		Scarlet Fever		Measles		Tuberculosis		Meningitis		Acute Anterior Poliomyelitis		Ophthalmia Neonatorum		Chickenpox		Influenza	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Adams	5	1	...	...	7	..	13	.	15	..	7	..	4	2	.	..	4	2	1	.	20		12	1
Ashland	36	1	12	3	13	2	4	.	27	2	6	..	4	27	.	3	..	.	1	.	3		8	3
Barron	30	6	1	1	4	2	185	.	158	3	123	3	7	20		5	4	.	..	.	29		3	5
Bayfield	26	2	3	..	10	..	93	.	10	..	6	..	7	16		1	..	.	1	.	18		10	.....
Brown	289	24	23	6	19	3	137	.	106	2	64	2	5	64	.	5	..	1	..	.	33		8	10
Buffalo	1	...	...	...	4	1	40	.	28	1	.....	..	1	4	.	1	..	.	..	.	5		1	1
Burnett	24	1	1	..	12	1	71	.	78	6	4	..	4	7	.	1	2	1	..	.	26		....	1
Calumet	9	...	6	..	21	..	20	.	60	..	26	..	5	5	.	3	2	1	..	.	166		....	1
Chippewa	87	5	..	..	76	3	70	.	227	4	8	..	39	34		1	2	1	..	.	83		250	25
Clark	31	4	3	1	27	2	30	.	93	5	121	1	4	9	.	..	4	.	..	.	34		26	6
Columbia	5	1	4	1	34	..	29	.	41	2	116	..	8	18		1	4	1	..	.	55		3	7
Crawford	3	1	1	..	126	4	77	.	42	1	89	..	7	10		1	..	.	1	.	21		44	.....
Dane	167	13	4	..	278	1	393	1	332	2	89	..	39	75	.	4	8	1	..	.	236		17	6
Dodge	15	1	..	..	44	2	66	.	75	2	10	..	29	27	.	5	5	2	1	.	90		....	2
Door	10	4	40	3	35	1	34	.	114	4	10	..	7	11	.	1	..	1	..	.	12		2	1
Douglas	90	9	20	2	18	8	94	.	252	9	17	..	21	34		4	..	.	..	.	33		....	1
Dunn	19	...	2	..	68	1	56	.	63	4	9	..	12	14		2	1	2	..	.	73		18	4
Eau Claire	50	4	19	2	159	3	23	.	132	2	25	..	18	41		2	..	.	3	.	183		46	1
Florence	1	...	...	..	18	..	4	.	5	..	2	..	...	2		..	..	.	..	.	6		....	.....
Fond du Lac	190	18	7	1	38	..	20	.	48	2	12	..	20	38		2	3	1	..	.	143		22	.....
Forest	13	1	2	..	31	3	46	.	11	2	11	..	...	5	.	..	..	.	..	.	3		....	.....
Grant	36	1	2	1	26	3	53	.	255	4	128	2	12	24		1	7	2	1	.	101		....	.....
Green	2	...	4	2	53	..	88	.	53	3	65	1	3	18		1	2	1	..	.	17		5	4
Green Lake	4	1	8	1	20	1	8	.	25	..	5	..	13	18		1	1	1	..	.	22		....	2
Iowa	6	...	2	..	61	2	64	.	65	1	22	2	2	8		..	4	1	..	.	114		....	.....
Iron	...	...	...	..	...	..	3	.	27	..	53	..	2	11	.	..	..	.	..	.	19		4	1
Jackson	18	2	8	1	2	3	12	.	52	4	10	1	4	14	.	..	3	.	..	.	29		....	1
Jefferson	17	1	3	..	90	..	23	.	58	1	61	..	25	39		..	2	.	..	.	117		3	2
Juneau	19	2	2	..	25	3	42	.	29	1	3	1	10	11		..	4	.	..	.	22		....	2
Kenosha	257	15	3	..	70	1	33	1	117	4	56	..	12	35		2	15	5	..	.	422		6	2

Kewaunee	26	2	2	2	14	....	92	....	103	7	32	....	4	9	1	....	....	....	....	....	14	....	....	....
La Crosse	18	1	13	....	53	2	105	3	131	....	106	....	38	59	2	3	2	1	1	....	181	....	17	1
Lafayette	26	3	1	....	17	4	26	....	57	3	3	....	6	11	....	2	2	2	....	....	26	....	1	2
Langlade	2	....	1	1	11	1	14	....	42	1	3	....	3	11	1	1	6	1	....	....	2	....	3	2
Lincoln	38	1	2	1	118	2	6	....	32	2	11	....	13	2	1	....	....	....	....	....	25	....	....	....
Manitowoc	19	1	14	3	70	4	158	2	89	6	146	....	55	46	....	1	....	1	....	....	77	....	2	4
Marathon	80	9	25	3	74	5	68	....	196	5	42	....	42	37	....	4	33	5	....	....	82	....	23	....
Marinette	26	3	11	2	92	1	143	....	115	2	180	2	20	22	....	1	....	....	....	....	59	....	4	2
Marquette	....	....	....	....	....	1	1	....	25	4	1	....	....	4	....	....	....	....	....	....	8	....	....	5
Milwaukee	1,622	125	43	12	952	23	755	....	1,467	63	337	6	874	544	34	21	34	8	....	....	1,955	....	4	25
Monroe	20	1	1	1	105	7	152	....	49	....	74	1	22	20	....	2	7	....	....	....	8	....	1	5
Oconto	68	10	1	....	45	1	65	1	51	1	51	1	11	11	....	2	....	....	....	....	21	....	....	1
Oneida	5	1	16	....	2	....	40	....	49	1	155	....	3	3	....	1	....	....	....	....	33	....	9	....
Outagamie	74	2	18	1	21	2	88	....	249	5	33	2	24	42	1	6	4	2	....	....	41	....	4	2
Ozaukee	9	1	4	....	4	1	9	....	25	....	2	....	4	6	1	1	1	....	....	....	16	....	12	3
Pepin	1	....	....	....	1	....	1	....	32	1	1	....	5	5	....	....	2	....	....	....	5	....	3	1
Pierce	10	2	1	....	29	1	22	....	33	....	22	....	9	8	....	1	....	....	....	....	35	....	28	3
Polk	32	5	1	....	98	3	144	....	68	2	39	....	18	11	....	1	3	....	....	....	28	....	39	....
Portage	111	8	2	....	12	1	4	....	151	5	41	2	10	30	....	1	5	1	....	....	49	....	....	7
Price	45	2	7	1	30	....	19	1	55	....	144	1	5	8	1	1	6	1	....	....	8	....	4	....
Racine	585	35	5	6	66	6	23	1	648	13	36	1	50	57	....	4	8	1	....	....	230	....	8	7
Richland	26	5	1	....	63	5	6	....	101	3	51	....	6	15	....	1	....	....	....	....	28	....	8	3
Rock	161	6	14	1	384	7	77	....	114	3	54	....	43	50	2	1	2	....	....	....	282	....	8	7
Rusk	16	3	4	2	2	1	16	....	82	1	2	1	....	4	....	....	....	....	....	....	9	....	4	....
St. Croix	27	1	3	1	42	3	194	....	42	1	15	1	13	21	....	....	4	1	....	....	27	....	....	1
Sauk	50	3	2	....	91	....	8	1	66	2	22	1	11	9	....	....	3	1	....	....	151	....	76	1
Sawyer	8	1	2	....	38	....	28	1	44	....	14	....	2	3	....	....	1	....	1	....	28	....	....	....
Shawano	29	4	....	....	44	....	27	....	37	4	28	1	3	19	1	2	....	....	....	....	7	....	3	1
Sheboygan	134	11	78	10	203	11	439	2	97	4	175	1	27	31	....	1	5	2	....	....	149	....	15	1
Taylor	8	4	3	....	63	....	35	....	35	1	....	....	3	7	....	1	5	1	....	....	12	....	17	2
Trempealeau	3	1	....	....	210	4	33	....	98	3	2	1	17	19	....	1	10	2	....	....	39	....	6	1
Vernon	64	5	14	1	104	4	26	....	76	....	15	1	17	17	1	....	2	....	....	....	20	....	106	8
Vilas	4	....	1	....	....	....	6	....	33	....	1	....	2	7	....	1	2	1	....	....	8	....	84	....
Walworth	16	4	3	....	160	3	73	....	95	2	75	....	17	17	2	3	8	2	1	....	50	....	7	2
Washburn	9	1	9	....	46	....	29	....	12	....	18	....	1	4	....	....	1	1	....	....	18	....	5	1
Washington	33	....	6	3	74	1	86	....	51	1	13	....	10	20	1	3	1	1	....	....	12	....	16	2
Waukesha	45	6	6	....	116	5	57	....	78	....	123	2	143	77	2	3	5	....	....	....	96	....	12	7
Waupaca	22	....	2	1	64	2	33	....	109	10	159	....	7	22	4	2	3	2	....	....	59	....	....	3
Waushara	11	....	1	1	26	3	36	....	125	6	78	1	11	7	2	1	8	3	....	....	23	....	16	3
Winnebago	156	8	10	....	53	....	73	....	66	1	37	....	14	65	1	3	4	2	....	....	240	....	4	2
Wood	76	6	5	....	9	1	68	1	161	6	25	2	12	16	....	....	5	....	....	....	59	....	....	2
Total	5,175	399	512	78	4,995	165	5,116	15	7,787	240	3,524	41	1,899	2,017	81	123	259	66	12	....	6,355	....	1,037	206

Case Fatality Ratios

A study of Table No. 3 shows clearly the degree of accurate reporting by physicians to local health officers. There is an improvement in 1921 over 1920. The reporting seems to compare favorably with the reporting in cities which have extensive health departments and are enabled to keep surveillance over their communities. For instance, the diphtheria mortality was 10.8% fatal in 1920 and 7.6% fatal in 1921. The average mortality rate has been in well supervised cities about 8%. Considering the extent of the rural area the percentages above quoted speak for good reporting. Tuberculosis is an exception and is under reported but the reporting is steadily climbing. Influenza reporting lessened in 1921 doubtless because of the uncertain type and consequent doubt in diagnosis. The high case fatality rate indicates a feeble attempt at reporting of influenza cases in that year.

TABLE III—NUMBER OF CASES AND DEATHS FROM COMMUNICABLE DISEASES IN WISCONSIN DURING 1920 AND 1921, WITH CASE FATALITY RATIOS FOR EACH DISEASE

DISEASES	1920			1921		
	Number of Cases	Number of Deaths	Case-Fatality Ratios	Number of Cases	Number of Deaths	Case-Fatality Ratios
Meningitis	115	151	131.0	81	123	151.0
Chickenpox	3,671	0	0	6,355	0	0
Diphtheria	3,485	379	10.8	5,175	399	7.6
Influenza	37,950	2,107	5.5	1,037	206	19.9
Measles	19,159	221	1.15	3,524	41	1.16
Poliomyelitis	84	16	19.0	259	66	25.5
Scarlet fever	5,822	252	4.33	7,787	240	3.09
Tuberculosis	1,774	2,243	127.0	1,899	2,017	106.0
Typhoid fever	313	70	22.3	512	78	15.1
Whooping cough	6,209	295	4.75	4,995	165	.33
Smallpox	5,668	9	.16	5,116	15	.29
Epidemic encephalitis	.....	.....	.....	32	57	178.0

TABLE IV—COMPARISON OF DEATH RATES PER 100,000 POPULATION FROM ALL CAUSES AND FROM CERTAIN COMMUNICABLE DISEASES IN WISCONSIN IN 1920 AND 1921, WITH THAT OF THE REGISTRATION AREA FOR 1920

DISEASES	Death Rates Per 100,000		
	Wisconsin		Registration Area 1920
	1920	1921	
All causes	1,130	1,030	1,210
Meningitis	5.7	4.6	6.
Diphtheria	14.5	15.0	15.3
Measles	8.8	1.5	8.8
Poliomyelitis	.6	2.5	.9
Scarlet fever	9.6	9.0	4.6
Smallpox	.34	.56	.6
Tuberculosis (all forms)	85.6	76.0	114.2
Typhoid fever	2.6	2.9	7.8
Whooping cough	11.3	6.2	12.5
Influenza	80.0	7.7	71
Pneumonia (all forms)	110.0	79.0	137.3
Lethargica encephalitis	.....	2.0	1.2

Comparison of Death Rates

Table No. 4 gives a comparison of the death rates per 100,000 in Wisconsin from communicable diseases with the rates in the U. S. registration area. With the exception of influenza and scarlet fever the Wisconsin rates are all lower for the years 1920 and 1921.

A glance at this table will demonstrate that Wisconsin is a healthy state in which to live.

Relative Fatality of Communicable Diseases

Tables 5 and 6 give the number of deaths and death rates from communicable diseases for 1920 and 1921 in the order of their prevalence. Tuberculosis leads the list but the other diseases are seen to be interchangeable in their order in the comparison of the two years.

TABLE V—DEATH RATES PER 100,000 POPULATION IN WISCONSIN AND UNITED STATES REGISTRATION AREA FROM COMMUNICABLE DISEASES IN 1920 (ARRANGED IN ORDER OF MAGNITUDE)

DISEASES	Number of Deaths in Wisconsin	Death Rates Per 100,000 Population	
		Wisconsin	Registration Area
Tuberculosis (all forms)	2,243	85.6	114.2
Influenza	2,107	80.	71.
Diphtheria	379	14.5	15.3
Whooping cough	295	11.3	12.5
Scarlet fever	252	9.6	4.6
Measles	221	8.8	8.8
Meningitis	151	5.7	6.0
Typhoid fever	70	2.6	7.8
Poliomyelitis	16	.6	.9
Smallpox	9	.34	.6

TABLE VI—DEATH RATES PER 100,000 POPULATION IN WISCONSIN AND UNITED STATES REGISTRATION AREA FROM COMMUNICABLE DISEASES IN 1921 (ARRANGED IN ORDER OF MAGNITUDE)

DISEASES	Number of Deaths in Wisconsin	Death Rate Per 100,000 Population
Tuberculosis	2,017	76.
Diphtheria	399	15
Scarlet fever	240	9
Influenza	206	7.7
Whooping cough	165	6.2
Meningitis	123	4.6
Typhoid fever	78	2.9
Poliomyelitis	66	2.5
Lethargica encephalitis	54	2.0
Smallpox	15	.5

Cerebrospinal Meningitis

The Decline in Meningitis. As will be seen by the accompanying table the mortality rate from cerebrospinal meningitis presents a steady drop for a number of years past. The cause of so gratifying and conspicuous an improvement in the mortality from a dread disease needs explanation.

Cause of Decline. Most fatalities from meningitis are complications of some other disease. It is probable that in the past in many instances the physician has signed death notices as meningitis and not stated the true nature of the disease of which it was a complication. This is necessarily so because spinal fluid tests are not taken by all physicians to determine the organism and the symptoms of the causative disease are often so masked as not to be identified. That the epidemic form is a minor proportion of the mortality totals here given is evident by the small numbers of reported cases of that type of meningitis. So all forms with the exception of meningitis of tubercular origin which has a classification of its own, are doubtless included in mortality tables.

In the ten years which the table covers the typhoid mortality has dropped many fold. As the early symptoms of typhoid, especially in children, often simulate a meningitis and a true meningitis may complicate the disease, a part of the decline may be in reality a result of the lessening typhoid.

Meningitis is also a complication of infantile enteritis. In the registration area from 1910 to 1920 the enteritis mortality in children under two years of age fell from 77.5 per 100,000 to 44 per 100,000. The totals in meningeal complications would be expected to keep pace with the downward progress of the disease.

During the same period the general death rate in all children under five years of age fell from 27 in 1910 to 21.7 in 1920, factors in this being a lessening in the deaths from acute bronchitis, diphtheria and some other diseases.

The fact that epidemic meningitis is curable by a serum is a favoring influence and was doubtless a partial factor in the decrease. The prevalence of local epidemics of this form is not evident by the reports in any year.

The table above shows a temporary increase in the year 1918 presumably because of the epidemic of influenza.

We, therefore, can reasonably assume that the decline of meningitis is largely due to a decline in certain infectious diseases and infantile trouble and can be accordingly ascribed to the advances of public health. These facts have not received the prominence that belong to them.

TABLE VII—NO. OF REPORTED CASES AND DEATHS FROM CEREBROSPINAL MENINGITIS IN WISCONSIN WITH ANNUAL DEATH RATES PER 100,000 POPULATION IN WISCONSIN AND UNITED STATES REGISTRATION AREA FROM 1912 TO 1921

YEAR	Reported Cases in Wisconsin	Reported Deaths in Wisconsin	Death Rate Per 1000,000 Population	
			Wisconsin	Registration Area
1912	82	280	11.7	11.5
1913	108	290	12.0	10.4
1914	75	209	8.6	8.8
1915	74	197	8.0	7.4
1916	111	213	8.6	7.1
1917	138	176	7.0	9.2
1918	182	259	10.2	9.9
1919	107	153	6.0	6.5
1920	115	151	5.7	6.0
1921	81	123	4.6	.....

Diphtheria

A study of the chart following does not show any improvement in the mortality rate in the last ten years. It is, however, lower in totals than in the decade prior to it and lower than in the registration area of the United States.

The progress in the control of the disease is not as satisfactory as we would wish. In the confusion with common colds and croup and because of rural distances to doctors and financial consideration in the employment of physicians, many children do not get antitoxin until late in the disease. The remedies for the above are through wider education as to the nature of the disease, the prompt isolation and testing of sore throats, the administration of antitoxin when needful and the use of toxin-antitoxin. There is no question but that inroads are made into the mortality where active health officers and public health nurses exist. There is no reason why the registration area should show a continuous decrease other than that better work is being extended throughout the United States.

TABLE VIII—NUMBER OF REPORTED CASES AND DEATHS FROM DIPHTHERIA IN WISCONSIN WITH ANNUAL DEATH RATES PER 100,000 POPULATION IN WISCONSIN AND UNITED STATES REGISTRATION AREA FROM 1912 TO 1921

Year	Reported Cases in Wisconsin	Reported Deaths in Wisconsin	Death Rates Per 100,000	
			Wisconsin	Registration Area
1912	1,913	279	11.7	18.2
1913	2,283	293	12.2	18.9
1914	2,767	328	13.5	17.9
1915	1,704	204	8.4	15.7
1916	1,981	221	8.9	14.5
1917	2,520	347	13.9	16.6
1918	1,774	271	10.7	13.9
1919	2,184	293	11.5	14.7
1920	3,485	379	14.5	15.3
1921	5,175	399	15.0	.....

Influenza

Influenza was made reportable by the State Board of Health in the year 1918. Placarding and isolation of epidemic influenza are required.

The pandemic of 1918 may be likened to a tidal wave with its ebb and flow not yet subsided. The first great outbreak of recent years occurred in September, October, and November, 1918; the second wave followed in January, February, and March, 1919 and the third outbreak happened in January, February, and March of 1920. It occurred again in the spring of 1921.

In 1920 there were 37,950 cases reported to the department, the great burden of them being in February. The epidemic was short lived.

During this year a survey on the relative susceptibility and immunity to the disease among 100 persons in whose families influenza occurred brought out the following:

13 contracted influenza in 1918 and not in 1920.

38 contracted influenza in 1920 and escaped in 1918.

13 contracted influenza both years.

36 escaped the disease both years.

The inferences from these tables are that immunity produced by an attack is not total and that many escaped direct contact sufficient to acquire the disease in the pandemic of 1918 and contracted it in 1920. Such an inference would indicate the usefulness of isolation in the attempt at prevention and control of the disease.

Although nearly as many cases were reported in 1920 as in 1918, the mortality was much less as the tables show. The record of 1921 shows less interest in reporting on the part of the profession and a much smaller death rate than in the preceding year. The lack of reporting was doubtless due to the mildness of the nature of the disease upon that year. A greater mortality in tuberculosis and diseases of the nervous system has not followed influenza as after the 1889-91 outbreak.

TABLE IX—NUMBER OF REPORTED CASES AND DEATHS FROM INFLUENZA IN WISCONSIN WITH ANNUAL DEATH RATES PER 100,000 POPULATION IN WISCONSIN AND UNITED STATES REGISTRATION AREA FROM 1912 TO 1921

Years	Reported Cases in Wisconsin	Reported Deaths in Wisconsin	Death Rates Per 100,000 Population	
			Wisconsin	Registration Area
1912	.....	255	10.7	10.3
1913	.....	356	14.8	12.2
1914	.....	227	9.3	9.1
1915	.....	490	2	16
1916	.....	562	22.6	26.5
1917	.....	349	13.9	17.3
1918	40,305	7,066	279.3	300.8
1919	6,983	2,230	87.5	98.8
1920	37,950	2,107	80.0	71.
1921	1,037	206	7.7	.....

Measles

The death rate is largely under 5 years of age with bronchopneumonia complications prevailing. While the reported death rate to the case rate is between one per cent and four per cent in various states, in reality it is much lower than this for the cases are not entirely reported—nevertheless, the multiplicity of cases causes many deaths. It is not the harmless disease that parents are given to understand. If it could be prevented until children are over 5 years of age, there would be a small number of deaths.

Preventative measures are with difficulty enforced because of a similarity of initial symptoms to a common cold. Information to this extent should be among all parents and information as to thorough care of any child with measles until that child is over it should reach all of them. There are no specific medicines at present. Neighbors are entitled to know when the children of others have measles and placarding should be enforced.

TABLE X—NUMBER OF REPORTED CASES AND DEATHS FROM MEASLES IN WISCONSIN WITH ANNUAL DEATH RATES PER 100,000 POPULATION IN WISCONSIN AND UNITED STATES REGISTRATION AREA FROM 1912 TO 1921

YEAR	Reported Cases in Wisconsin	Reported Deaths in Wisconsin	Death Rates Per 100,000 Population	
			Wisconsin	Registration Area
1912	3,235	127	5.2	7.0
1913	6,046	210	7.6	12.8
1914	6,099	150	6.0	6.8
1915	4,425	47	2.1	5.4
1916	16,154	289	11.8	11.1
1917	5,711	63	2.9	14.3
1918	19,376	155	6.1	10.8
1919	4,335	66	2.6	3.9
1920	19,159	221	8.8	8.8
1921	3,524	41	1.5	.....

Poliomyelitis

There have been no recent advances in the knowledge or treatment of infantile paralysis. The year 1920 shows a decline in cases and the year 1921 a marked increase—nearly totalling the figures of 1916 when poliomyelitis prevailed throughout the country. Since the epidemic year of 1916 the number of cases reported greatly exceeds the number of deaths, which indicates that reporting by physician is much better than prior to that time. It is to be noted that in the year 1916, when this disease received much notoriety, the cases reported were about seven times the mortality and in succeeding years about four times the mortality. Prior to 1916 the case rate averaged a little more than double the mortality. During 1921 the cases were

well scattered over the state; the extreme rural counties participating with settled counties. From July to October there were four deaths in Kenosha County, four in Marathon County, three in Milwaukee County, two in Walworth County, two in Winnebago County, and one each in many other counties.

TABLE XI—NUMBER OF REPORTED CASES AND DEATHS FROM POLIOMYELITIS (INFANTILE PARALYSIS) IN WISCONSIN WITH ANNUAL DEATH RATES PER 100,000 POPULATION IN WISCONSIN AND UNITED STATES REGISTRATION AREA FROM 1912 TO 1921

YEAR	Reported Cases in Wisconsin	Reported Deaths in Wisconsin	Death Rates Per 100,000 Population	
			Wisconsin	Registration Area
1912	54	25	1.3	1.9
1913	79	25	1.2	1.4
1914	30	14	0.8	1.1
1915	15	12	0.5	1.0
1916	475	65	2.7	10.0
1917	57	24	1.0	1.6
1918	270	89	3.5	1.2
1919	226	51	2.0	0.9
1920	84	16	.6	0.9
1921	259	66	2.5	.....

Scarlet Fever

A study of the attendant table shows that scarlet fever in Wisconsin is uniformly higher than scarlet fever in the registration area. The registration area, however, includes some gulf and coast states where scarlet fever is notoriously low in totals. The table shows a higher case rate in proportion to death rate after the year 1915. In the consideration of this point we have two alternatives; either a differing malignancy in the character of the disease or a much better reporting on the part of physicians. As there has been a coincidental improvement in reporting among other communicable diseases there is a like inference in the case of scarlet fever.

TABLE XII—NUMBER OF REPORTED CASES AND DEATHS FROM SCARLET FEVER IN WISCONSIN WITH ANNUAL DEATH RATES PER 100,000 POPULATION IN WISCONSIN AND UNITED STATES REGISTRATION AREA FROM 1912 TO 1921

YEAR	Reported Cases	Reported Deaths	Death Rates Per 100,000 Population	
			Wisconsin	Registration Area
1912	3,304	283	11.9	6.7
1913	2,806	197	8.2	8.7
1914	3,195	215	8.9	6.6
1915	1,991	85	3.5	3.6
1916	3,981	125	5.0	3.3
1917	7,038	245	9.8	4.2
1918	4,401	198	7.8	3.0
1919	3,766	152	5.9	2.8
1920	5,822	252	9.6	4.6
1921	7,787	240	9.0	.....

Smallpox

The longer a community pays little heed to vaccination the more prevalent smallpox becomes. Laxity in vaccination may be considered as the forerunner of future malignant outbreaks. There are many communities in Wisconsin where the children remain unvaccinated. The climbing death rate is shown in the above tables. Smallpox of late is more frequent in proportion to population in the northern part of the state than in the southern and eastern portion which is doubtless because of longer seasons and consequent closer housing conditions and lack of vaccination.

TABLE XIII—NUMBER OF REPORTED CASES AND DEATHS FROM SMALLPOX IN WISCONSIN WITH ANNUAL DEATH RATES PER 100,000 POPULATION IN WISCONSIN AND UNITED STATES REGISTRATION AREA FROM 1912 TO 1921

YEAR	Reported Cases	Reported Deaths	Death Rates Per 100,000 Population	
			Wisconsin	Registration Area
1912	811	3	.12	0.3
1913	2,034	4	.16	0.2
1914	3,302	5	.2	0.3
1915	1,817	6	.24	0.3
1916	867	1	.04	0.2
1917	1,280	2	.1	0.3
1918	2,600	13	.5	0.4
1919	3,297	5	.2	0.4
1920	5,668	9	.34	0.6
1921	5,116	15	.56	.....

Typhoid Fever

The declining death rate is evident in the table attached.

The value of efforts toward purification of water supplies, typhoid vaccination and other measures is here shown. Wisconsin has reason to look with pride upon its typhoid record.

In 1920 Wisconsin tied with Massachusetts for the lowest mortality record in the registration area of the United States and in 1921 all states except Rhode Island were reported to have a higher rate. The record for Rhode Island was slightly under that of Wisconsin.

During the first half of 1921 there was a prevalence of cases in Sheboygan from untreated lake water and during the latter half of 1921 an outbreak occurred at Green Bay because of a polluted well in use by numbers of factory people.

TABLE XIV—NUMBER OF REPORTED CASES AND DEATHS FROM TYPHOID FEVER IN WISCONSIN WITH ANNUAL DEATH RATES PER 100,000 POPULATION IN WISCONSIN AND UNITED STATES REGISTRATION AREA FROM 1912 TO 1921

YEAR	Reported Cases in Wisconsin	Reported Deaths in Wisconsin	Death Rates Per 100,000 Population	
			Wisconsin	Registration Area
1912	1,007	310	13	16.5
1913	670	237	9.9	17.9
1914	553	176	7.3	15.5
1915	420	123	5.0	12.4
1916	1,009	202	8.2	13.3
1917	486	137	5.5	13.5
1918	368	102	4.0	12.6
1919	215	82	3.2	9.2
1920	313	70	2.6	7.8
1921	512	78	2.9	.....

Tuberculosis

Continuing its downward progress Wisconsin had its lowest death rate from tuberculosis in 1921. While tuberculosis is by no means conquered, the trend of figures shows that efforts at its prevention have accomplished much and that the results of the tuberculosis movement have been of great value to the people of Wisconsin. The chart brings out the noticeable fact that in no year have the cases reported to the State Health Department equaled the number of deaths.

There is, however, great improvement in this respect for in 1912 the deaths were not quite double the reported cases and in 1921 the cases were approaching an equality.

The State Department of Health makes use of the reports of the state laboratories and the tests of sputum which prove positive for tuberculosis serve to locate unreported cases.

It is the duty of the local health officer to see that all persons in his district who have tuberculosis shall take the proper sanitary precautions for the protection of others. There can be no doubt that the various county sanatoria for tuberculosis are a great humanitarian as well as life-saving project. In them the sick and depressed individual, who may be without proper home attention, finds a place to be adequately taken care of.

TABLE XV—NUMBER OF REPORTED CASES AND DEATHS FROM TUBERCULOSIS IN WISCONSIN WITH ANNUAL DEATH RATE PER 100,000 POPULATION IN WISCONSIN AND UNITED STATES REGISTRATION AREA FROM 1912 TO 1921

YEAR	Reported Cases	Reported Deaths	Death Rates Per 100,000 Population	
			Wisconsin	Registration Area
1912	1,206	2,384	99.6	149.7
1913	1,677	2,368	97.9	147.8
1914	1,766	2,451	100.2	147.2
1915	1,765	2,387	96.4	146.3
1916	1,590	2,328	93.1	142.1
1917	2,104	2,485	98.3	147.1
1918	1,852	2,413	95.0	150
1919	1,638	2,191	86.0	125.6
1920	1,774	2,243	85.6	114.2
1921	1,899	2,017	76	.....

Whooping Cough

A review of ten years represented by the table does not show a diminution of the disease. It does show, however, that the cases are being reported in greater numbers in comparison to the death rate. During 1912 there was one death in about five reported cases while in 1921 there was one death in about thirty reported cases. Undoubtedly the true death rate is at a still lower proportion than this. The total number dying from the disease in Wisconsin in the last ten years is nineteen hundred and thirteen. The fact that about 90 per cent of them were under five years of age should be made plain to the mothers of the state in order that especial care may be given children under that age. Fresh Pertussis Vaccine is declared by some physicians to be worthy of use in the prevention of whooping cough and the State Laboratory of Hygiene furnishes it to physicians without cost.

TABLE XVI—NUMBER OF REPORTED CASES AND DEATHS FROM WHOOPING COUGH IN WISCONSIN WITH ANNUAL DEATH RATES PER 100,000 POPULATION IN WISCONSIN AND UNITED STATES REGISTRATION AREA FROM 1912 TO 1921

YEAR	Reported Cases	Reported Deaths	Death Rates Per 100,000 Population	
			Wisconsin	Registration Area
1912	1,180	232	9.7	9.3
1913	1,146	211	8.7	10.0
1914	1,139	155	6.4	10.4
1915	2,318	186	7.6	8.1
1916	2,505	167	6.7	10.2
1917	3,130	195	7.8	10.5
1918	3,128	189	7.5	16.9
1919	2,006	118	4.6	5.5
1920	6,209	295	11.3	12.5
1921	4,995	165	6.2	.....

Lethargic Encephalitis

Lethargic encephalitis was not described as a disease until the year 1917. In all probability there were outbreaks of it prior to that year, which occurring with influenza escaped classification into a clinical entity.

Just what the connection with influenza is, is uncertain other than the fact that so far epidemics of the two diseases occur simultaneously. It is regarded as a communicable disease due to an uncertain specific agent. The degree of communicability is the lowest of all known communicable troubles being more pronounced in this respect than poliomyelitis.

The nose and mouth secretions are known to contain the causative organism.

It occurs in greater numbers in the winter and spring months and no age is exempt, although the preponderance of cases is below 45 years of age. It is considered to be more frequent in males. The death rate is between 20 and 40 per cent. It is variously stated that from 10 to 30 per cent make a good recovery and the rest of the surviving cases show a variety of residual symptoms. Some of these symptoms may appear after a lapse of time in which apparent recovery has taken place.

It is a disease to be feared and the cause of chronic invalidism in many cases.

It was made reportable by the State Board of Health in 1920 and isolation but not quarantine is required. It is the part of wisdom not to transfer the secretions any further than necessary notwithstanding the limited effect it may have in lessening the centers of infection.

TABLE XVII—NUMBER OF REPORTED CASES AND DEATHS FROM LETHARGIC ENCEPHALITIS IN WISCONSIN AND THE ANNUAL DEATH RATE PER 100,000 POPULATION IN WISCONSIN AND UNITED STATES REGISTRATION AREA DURING 1920 AND 1921

YEAR	Reported Cases	Reported Deaths	Death Rates Per 100,000 Population	
			Wisconsin	Registration Area
1920	2	.....	.....	0.4
1921	32	54	2.	1.2

Comparison of Death Rates From Combined Causes

The total deaths from the principal communicable diseases outside of influenza in 1920 was 3,622 and in 1921 was 3,149. The following table gives the death rates per 10,000 people for each county of the state arranged in the order of their magnitude. There is a shifting of county rates each year but the counties having the larger cities are mostly in the second column which has the larger rates and a study of these tables for the last four years shows this to be generally true.

TABLE XVIII—DEATH RATES PER 100,000 POPULATION IN WISCONSIN COUNTIES DURING 1920 FROM MENINGITIS, DIPHTHERIA, MEASLES, POLIOMYELITIS, SCARLET FEVER, SMALLPOX, TUBERCULOSIS, TYPHOID FEVER AND WHOOPING COUGH (ARRANGED IN ORDER OF MAGNITUDE)

COUNTIES	Number of Deaths	Death Rates Per 10,000	COUNTIES	Number of Deaths	Death Rates Per 10,000
Marquette	3	2.8	Pepin	8	10.7
Price	7	3.7	Dodge	53	10.7
Richland	8	4.0	Waupaca	38	11.1
Door	10	5.2	Marathon	76	11.2
Walworth	16	5.4	Marinette	40	11.6
Lafayette	11	5.5	Ozaukee	19	11.7
Buffalo	9	5.7	St. Croix	31	11.9
Green Lake	9	6.0	Sawyer	10	12.1
Clark	21	6.0	Fond du Lac	69	12.2
Washburn	7	6.2	Vilas	7	12.3
Waushara	11	6.6	Washington	32	12.4
Taylor	12	6.7	Kenosha	64	12.4
Polk	18	6.7	Forest	14	14.2
Juneau	13	6.8	Bayfield	25	14.6
Sauk	23	7.0	Burnett	16	14.7
Adams	7	7.5	Winnebago	94	14.8
Wood	27	7.8	Oneida	21	15.0
Pierce	17	7.9	Rock	100	15.1
Dunn	21	7.9	Portage	52	15.5
Monroe	23	8.0	Kewaunee	25	15.5
Calumet	14	8.1	Sheboygan	94	15.7
Jackson	15	8.4	Outagamie	92	16.4
Green	19	8.8	Shawano	51	16.5
Rusk	15	9.1	Manitowoc	85	16.5
Lincoln	19	9.1	Chippewa	60	16.5
Columbia	28	9.2	Florence	6	16.6
Oconto	26	9.6	Racine	133	16.8
Iron	10	9.7	La Crosse	79	17.7
Dane	88	9.9	Douglas	93	18.8
Crawford	17	10.1	Brown	116	18.8
Barron	35	10.1	Milwaukee	1,039	19.2
Trempealeau	25	10.2	Eau Claire	72	20.0
Langlade	22	10.2	Waukesha	108	25.4
Grant	40	10.2	Ashland	64	26.0
Iowa	22	10.2			
Jefferson	37	10.5			
Vernon	31	10.6	Total	3,622	11.3

TABLE XIX—DEATH RATES PER 10,000 POPULATION IN WISCONSIN COUNTIES DURING 1921 FROM MENINGITIS, DIPHTHERIA, MEASLES, POLIOMYELITIS, SCARLET FEVER, SMALLPOX, TUBERCULOSIS, TYPHOID FEVER AND WHOOPING COUGH (COMBINED). (ARRANGED IN ORDER OF MAGNITUDE)

COUNTIES	Number of Deaths	Death Rates Per 10,000	COUNTIES	Number of Deaths	Death Rates Per 10,000
Lincoln	8	3.8	Bayfield	19	11.0
Oneida	6	4.2	Fond du Lac	62	11.0
Calumet	9	5.2	St. Croix	29	11.0
Sauk	17	5.2	Monroe	32	11.1
Adams	5	5.3	Outagamie	62	11.1
Florence	2	5.5	Washington	29	11.1
Ozaukee	9	5.5	Sheboygan	73	11.3
Pierce	12	5.6	Waupaca	39	11.3
Washburn	6	5.8	Barron	40	11.5
Sawyer	5	5.9	Jefferson	41	11.7
Clark	22	6.2	Kenosha	63	11.8
Iowa	14	6.9	Green	26	12.0
Rusk	12	7.1	Manitowoc	64	12.1
Langlade	16	7.3	Winnebago	79	12.3
Taylor	14	7.6	Kewaunee	20	12.5
Buffalo	12	7.7	Lafayette	25	12.5
Columbia	24	7.9	Trempealeau	31	12.6
Dodge	39	7.9	Chippewa	48	13.0
Pepin	6	8.0	Door	25	13.1
Polk	22	8.0	Waushara	22	13.1
Price	15	8.0	Douglas	66	13.2
Marquette	9	8.4	Jackson	25	14.0
Dunn	23	8.5	Portage	48	14.1
Shawano	30	8.8	Richland	29	14.5
Wood	32	9.1	Milwaukee	802	14.6
Juneau	18	9.4	Eau Claire	54	15.0
Marinette	33	9.5	Ashland	38	15.3
Vernon	28	9.6	Racine	124	15.3
Grant	38	9.7	Green Lake	23	15.5
Oconto	27	9.9	La Crosse	69	15.5
Crawford	17	10.1	Burnett	17	15.6
Rock	68	10.1	Vilas	9	15.8
Marathon	68	10.2	Brown	107	17.1
Iron	11	10.5	Waukesha	93	21.5
Walworth	31	10.5			
Dane	97	10.7	Total	3,149	10.5
Forest	11	10.8			

Cancer Week 1921

During the week of October 30th to November 5th, 1921, a Cancer Campaign was conducted in Wisconsin. This had for its object the calling of the attention of the people at large to the dangers of neglecting treatment in early cancer and to the advisability of treatment or removal of the precancerous lesions in the hopes that the high mortality from that disease may be lessened.

The American Society for the Control of Cancer with headquarters in New York are the instigators of programs in various states of the union and at their request the State Board of Health assumed responsibility for the work. Letters were sent to medical men, the clergy, various clubs and state organizations and to some individuals asking their cooperation. The response was good. Many lectures were given throughout Wisconsin and much information on Cancer

reached the people. The pamphlets "What We Know About Cancer." "What Every Adult Should Know" and "Fourteen Points About Cancer" were widely distributed. Dr. I. F. Thompson of the State Board of Health assumed charge of the actual work of conducting this campaign.

FINANCIAL STATEMENT—COMMUNICABLE DISEASE DIVISION
From July 1, 1921 to December 31, 1921

MONTH	Salaries	Traveling Expenses	Printing and Paper	Superintendent Public Property
July	$ 92.50	.....	.....	.....
August	95.00	$ 29.70	.....	.....
September	218.39	34.15	.....	$10.41
October	577.36	293.20	$7.20	10.75
November	818.32	77.60	.....	6.12
December	818.32	192.49	.....	.....
Total	$2,619.89	$627.14	$7.20	$17.28

Fund Allotted by State	$13,300.00PP
Disbursements	3,271.51PP
	PP
Balance on Hand January 1, 1923	$10,028.49PP

FINANCIAL STATEMENT—COMMUNICABLE DISEASE DIVISION
From January 1, 1922, to June 30, 1922.

MONTH	Salaries	Traveling Expenses
January	$ 818.32	$297.39
February	818.32	218.31
March	818.32	79.37
April	818.32	89.39
May	678.24	118.71
June	818.32	137.72
Total	$4,769.84	$940.89

Balance on Hand January 1, 1923	$10,028.49
Disbursements	5,710.73
Balance on Hand July 1, 1922	$4,317.76

VENEREAL DISEASES

The facts concerning the inauguration of the Wisconsin program in venereal diseases are to be found in the biennial report of the State Board of Health for the years 1919 and 1920. The various legislative steps in the progress of the care of venereal diseases are as follows:

In 1909, a law was enacted requiring a physician or midwife to use prophylactic treatment in the eyes of the new-born. In 1913, syphilis and gonorrhea were made reportable and the eugenics marriage law was passed. In 1915, the State Psychiatric Institute was permitted to make free Wassermann examinations for the physicians of the state. The World War brought the subject strongly to the foreground and in 1918 and again in 1919, the venereal disease laws of Wisconsin were amended and made more comprehensive and to correspond more closely to those existing in many other states of the union. Under the stimulus of the government aid the present Division of Venereal Diseases was established upon January 1, 1919.

Finances

The Chamberlain-Kahn Act was passed by the Sixty-Fifth Congress and, among other provisions, appropriated $1,000,000 for each of the fiscal years 1919 and 1920, to be divided among the various states. The appropriation for Wisconsin for the year ending June 30, 1919 was $25,375.70; the appropriation for the fiscal year ending June 30, 1920 was $25,000.00 and had to be met with a like sum from the Wisconsin legislature which was correspondingly done. For the year ending June 30, 1921, the sum of $13,863.89 was obtained from the federal government and an equal sum was appropriated by the State of Wisconsin. For the year ending June 30th, 1922, nothing was given by the federal government, but the Wisconsin legislature appropriated $41,250.00. For the fiscal year 1923, the sum of $5,602.23 was received from the federal government and an additional sum was appropriated from the state to make $41,250.00.

The government requires that the federal allotment and the amount of state funds used to secure the allotment shall be expended in the proportion of 50 per cent for clinics, institutions and arsphenamine; 20 per cent for education. 20 per cent for repressive measures and 10 per cent for administration. All our expenditures are reported to Washington and endorsed by them.

Upon the first of January, 1921, the finances were as follows:

Balance on hand from the 1919 fund	$ 6,821.17
Balance on hand from the 1920 fund	9,003.95
Balance on hand from the 1921 fund	16,540.48

FINANCIAL STATEMENT—SOCIAL HYGIENE DIVISION

JANUARY 1, 1921, TO JUNE 30, 1921

1919 FUND

(A) MONTH	Salaries	Traveling Expenses	Superintendent Public Property	Printing and Paper	Miscellaneous
January	$2,149.50	$216.68	$ 841.65	.....	$324.38
February	2,188.33	320.93	709.48	.....	70.60
Total	$4,337.83	$537.61	$1,551.13	.....	$394.98

Balance on Hand January 1, 1921 ..... $6,821.17
Disbursements 6,821.17

1920 FUND

(B) MONTH	Salaries	Traveling Expenses	Superintendent Public Property	Printing and Paper	Miscellaneous
January	.....	.....	.....	.....	$ 216.19
February	.....	.....	.....	.....	.....
March	$2,323.28	$350.86	$1,198.93	$200.00	255.19
April	2,775.82	584.20	293.63	70.00	735.85
Total	$4,099.10	$955.06	$1,492.56	$270.00	$1,207.23

Balance on Hand January 1, 1921 ..... $9,003.95
Disbursements 9,003.95

1921 FUND

(C) MONTH	Salaries	Traveling Expenses	Superintendent Public Property	Printing and Paper	Miscellaneous
January	.....	$ 24.06	.....	.....	$ 1.20
February	.....	.....	.....	.....	.....
March	.....	11.20	$ 815.18	$ 2.70	312.46
April	$ 185.46	.....	.....	.....	.....
May	2,775.82	490.86	.....	.....	.....
June	2,740.70	466.80	3,744.61	1,629.91	521.92
Total	$5,701.98	$992.92	$4,559.79	$1,632.61	$835.58

Balance on Hand January 1, 1921 ..... $16,540.48
Disbursements 13,722.88

Balance on Hand June 30, 1921 ..... $2,817.60

JULY 1, 1921, to DECEMBER 31, 1921

(A) MONTH	Traveling Expenses	Superintendent of Public Property	Printing and Paper
July	$150.45	$ 799.32	.....
August	.....	132.22	$ 30.24
September	.....	.....	.....
October	.....	463.63	81.78
November	.....	804.20	201.64
December	.....	70.04	86.08
Total	$150.45	$2,267.41	$399.74

Balance on Hand July 1, 1921 ..... $2,817.60
Disbursements 2,817.60

1922 FUND

(B) MONTH	Salaries	Traveling Expenses	Superintendent Public Property	Printing and Paper	Miscellaneous
July	$ 2,016.66	$ 65.44	.....	.....	$ 60.00
August	2,059.99	178.20	.....	.....	.....
September	1,861.60	353.09	.....	.....	4.00
October	1,929.47	599.63	.....	.....	80.00
November	1,763.67	195.71	.....	.....	3.00
December	1,914.03	616.30	$50.84	.....	540.64
Total	$11,545.42	$2,006.37	$50.84	.....	$687.64

Fund Allotted by State $41,250.00
Disbursements 14,290.27
Balance January 1, 1922 ..... $26,959.73

MONTH	Salaries	Traveling Expenses	Stationery, Office Supplies	Postage	Printing	Miscellaneous
January	$ 2,041.91	$ 329.59	$ 25.99	$ 10.00	$ 91.33	$ 818.95
February	2,254.99	871.58	26.14	60.18	34.80	127.40
March	2,064.99	301.79	45.11	20.00	45.93	526.00
April	2,484.99	653.80	13.87	45.00	87.11	142.85
May	2,454.99	779.94	23.21	46.00	194.15	753.39
June	2,202.18	258.96	51.03	.....	37.08	94.06
Total	$13,504.05	$3,195.66	$185.35	$181.18	$490.40	$2,462.65

Balance on Hand January 1, 1922 ..... $26,959.70
Disbursements 20,019.29

Balance on Hand June 30, 1922 ..... $ 6,940.41

ORGANIZATION AND PERSONNEL

Bureau of Communicable Diseases

Dr. Robt. Oleson, Acting Director, 1921.
Dr. H. M. Guilford, Acting Director, 1922.

Division of Venereal Diseases

Dr. I. F. Thompson, Director, 1921.
Dr. H. M. Guilford, Acting Director, 1922.
Miss Martha Riley, Director of Social Work.
Miss Aimee Zillmer, Assistant in Education.
Mr. Frank Sherwood, Assistant in Education.
Dr. V. A. Gudex, Lecturer.

Clinics	Physicians	Social Worker
Beloit	*Dr.L. M. Field	Leona Ludwig
Janesville	Dr. C. H. Sutherland	Leona Ludwig
Kenosha	Dr. F. E. Andre	Mrs. Nell Flatley, 1921
Racine	*Dr. H. W. Morgenroth	Jane Dorst, 1922
Madison	Dr. Ira Sisk	Susan Mitchell
Oshkosh	Dr. J. F. Schneider	R. Fern Chase
Superior	Dr. F. J. Broghammer	Evelyn A. Norman
Wausau	Dr. R. F. Fisher	Josephine Semsch
Green Bay	Dr. G. F. Goggins	Honora Querns
Milwaukee	*Three local dispensaries	
La Crosse	Dr. G. R. Reay	

*Local doctor paid by community.

Plan of Operation

1. The physician and certain institutions are under penalty to report to the State Board of Health venereal disease cases that come to them for treatment.

2. Patients are given a printed circular of instruction, informing them of the necessary measures to prevent the spread of infection.

3. The source of infection is to be inquired into and investigated, if necessary, in the interests of the public.

4. All persons having venereal disease must remain under treatment until no longer communicable, and such as refuse to do so may be committed to an institution. Indigents must be cared for at county expense.

5. Those infected persons who do not cooperate in protecting others from infection may be committed to a county or state institution by the state health officer or deputy state health officer and there kept until no longer communicable. The use of quarantine is legal.

6. Arsphenamine and other drugs are furnished by the state for the poor, free of charge. The number of doses of arsphenamine and neo-arsphenamine supplied by the State Board of Health for 1921 to clinics, hospitals, indigents and others was 5,613; for the year 1922, 4,428.

Clinics

For the furtherance of the above plan free clinics have been established at Kenosha, Racine, Milwaukee, Oshkosh, Green Bay, Wau-

sau, Superior, La Crosse, Madison, Janesville and Beloit. At Racine, Beloit and the Milwaukee County Dispensary, the Milwaukee City Dispensary and the Marquette Dispensary the physician and equipment are furnished by the community, and the arsphenamine and neo-arsphenamine and a social worker are furnished by the State Health Department. The personnel will be found on a foregoing page. With the above exception the state furnishes physician, social worker, equipment and drugs, the city furnishes rooms, heat, light, laundry, etc., and a clerk if required.

These clinics serve as an outlet for proper diagnosis and treatment of those unable to afford a physician, and the indigent and unwilling who are brought there through the efforts of the social worker. They serve as the instruments for the care of an element which without proper supervision is a menace to the community. The total arsphenamine and neo-arsphenamine used in the clinics was 5,471 ampules in 1921 and 2,477 in 1922.

The following table is an addition of new cases admitted to treatment during each month in all the dispensaries and of visits for advice or treatment.

TABLE I—SHOWING NUMBER OF CASES ADMITTED TO CLINICS BY MONTHS
1921

MONTHS	Gonorrhea	Syphilis	Visits for Advice and Treatment
January	42	31	1,571
February	41	36	1,714
March	49	38	1,822
April	50	54	1,947
May	40	36	1,757
June	27	27	1,040
July	59	28	1,567
August	45	27	1,357
September	71	41	1,950
October	50	30	1,996
November	48	42	1,966
December	61	25	2,056
Total	584	415	20,743

TABLE II—SHOWING NUMBER OF CASES ADMITTED TO CLINICS BY MONTHS
1922

MONTH	Gonorrhea	Syphilis	Chancroid	Visits for Advice and Treatment	Number of Treatments
January	100	51	.....	2,339	351
February	47	28	.....	2,083	1,909
March	62	48	.....	2,323	2,031
April	47	40	.....	2,080	1,894
May	52	37	.....	2,093	1,010
June	38	37	.....	1,925	964
July	51	35	3	1,655	868
August	50	35	4	1,684	703
September	48	46	.....	1,662	722
October	54	41	.....	1,965	814
November	51	38	.....	1,987	901
December	50	30	.....	1,851	734
Total	641	465	7	23,289	12,961

TABLE III—SHOWING LABORATORY EXAMINATIONS OF CLINICS BY MONTHS

		1921			1922	
MONTH	Wassermans	Trepenoma Examination	Microscopic Examination for Gonorrhea	Wassermans	Trepenoma Examination	Microscopic Examination for Gonorrhea
January	341	.....	255	456	19	441
February	334	6	275	305	12	225
March	440	11	242	483	10	295
April	412	142	192	460	10	257
May	199	3	177	465	11	271
June	345	27	266	308	54	128
July	231	3	296	355	12	179
August	308	7	311	320	14	244
September	416	23	371	310	14	286
October	418	28	366	554	13	412
November	351	21	230	444	9	362
December	358	0	227	412	25	240
Total	4,153	268	3,208	4,872	203	3,240

Social Service Workers

The duties of the social workers are to keep records and assist in the clinics, investigate financial status of those applying for free treatment, follow-up with discretion reported sources of infection; secure cooperation of courts and organizations who can assist in the work; visit physicians and druggists when necessary; follow-up cases who fail to continue treatment and assist in educational and correctional measures. Part of their work is reflected in the preceding tabulation on clinics.

The following table is a record of visits outside of the clinics and of detentions and hospitalizations:

TABLE IV—SHOWING NUMBER OF VISITS AND INVESTIGATIONS OF SOCIAL WORKERS, AND NUMBER OF DETENTIONS AND HOSPITALIZATIONS

MONTH	1921			1922		
	Visits and Investigations	Number of Detentions	Number of Hospitalizations	Visits and Investigations	Number of Detentions	Number of Hospitalizations
January	965	4	11	1,140	6	10
February	1,132	2	10	778	1	2
March	1,114	.....	4	1,176	6	9
April	1,081	.....	3	864	.....	5
May	1,112	2	5	1,140	.....	.....
June	1,142	4	3	777	3	7
July	941	3	7	801	4	3
August	577	6	11	853	8	7
September	1,227	5	7	922	5	2
October	955	5	3	1,047	6	7
November	1,008	8	5	691	5	10
December	1,053	2	4	619	4	2
Total	12,307	41	73	10,808	48	64

EDUCATIONAL

Educational Activities Jan. 1, 1921, to Dec. 31, 1921

Groups and Organizations	Lectures			
	Soc. Hygiene		General Health	
	Number	Attendance	Number	Attendance
State				
Wisconsin Teachers' Association	2	5,250	.....	.....
Wisconsin National Guards	4	5,000	.....	.....
County and District				
District Teachers' Associations	.....	.....	1	250
District Nurses' Conferences	3	108	.....	.....
County Board Conventions	.....	.....	2	100
County Teachers' Institutes	3	245	.....	.....
County School Board Conventions	.....	.....	2	400
Schools				
Colleges (men and women)	12	5,215	.....	.....
College men	10	1,405	.....	.....
College women	9	1,310	.....	.....
Normal (men and women)	8	3,741	.....	.....
Normal (men)	6	1,270	.....	.....
Normal (women)	4	1,195	.....	.....
County Training Schools	13	495	1	49
High (boys and girls)	8	2,460	44	6,109
High (boys)	245	6,187	.....	.....
High (girls)	83	5,011	.....	.....
Vocational Boys	51	5,872	.....	.....
Vocational Girls	18	422	.....	.....
Graded	.....	.....	89	4,381
State Graded and Rural	.....	.....	62	1,905
Social and Religious				
Women's Organizations	71	2,352	.....	.....
Church Groups	21	918	.....	.....
Community Clubs	.....	.....	13	1,953
Rotary & Kiwanis	8	405	.....	.....
Industrial Groups	2	190	.....	.....
Films				
Adults	98	25,405	.....	.....
Students	88	20,295	.....	.....
Exhibits				
Total Exhibits	214	18,619	.....	.....
Grand Total	981	113,370	214	15,147

EDUCATIONAL ACTIVITIES—BUREAU SOCIAL HYGIENE

January 1 to December 31, 1922

Groups and Organizations	Lectures			
	Social Hygiene		General Health	
	Number	Attendance	Number	Attendance
State				
Wisconsin Teachers' Association	2	300	2	9,000
Wisconsin State Conference of Social Work	1	80	.....	.....
Wisconsin State H. O. & P. H. N	1	150	2	250
Wisconsin and Mississippi Valley (W.A.T.A.)	.....	.....	1	300
District and County				
District Teachers' Association	1	125	.....	.....
District Conference Social Work	5	697	.....	.....
District Federation Women's Clubs (3rd)	1	80	.....	.....
County Board Conventions	.....	.....	2	62
County School Board Conventions	.....	.....	1	250
County Teachers' Institutes	9	965	7	1,149
County Conference Social Work	1	125	.....	.....
County Farmers' Institutes	2	220	.....	.....
County Medical Society	1	21	.....	.....
County and City Official Groups, Councils, Police Department, etc	39	937	.....	.....
Schools and Colleges				
College (men and women)	.....	.....	1	362
College (men)	8	738	.....	.....
College (women)	1	75	.....	.....
State Normals (men and women)	8	2,450	6	2,040
State Normals (men)	6	913	.....	.....
State Normals (women)	6	1,280	1	450
High and Junior High (boys and girls)	.....	.....	78	13,739
High and Junior High (boys)	525	28,051	.....	.....
High and Junior High (girls)	140	10,691	.....	.....
Nurses' Training	33	888	3	91
County Teachers' Training	23	927	19	975
Teachers' Conferences—Clubs	4	230	.....	.....
County Agricultural Schools	2	75	2	200
Vocational (boys and girls)	.....	.....	2	155
Vocational (boys)	6	200	.....	.....
Vocational and Business (girls)	77	720	.....	.....
Graded and Rural	.....	.....	289	15,680
Social and Religious				
Women's Organizations	92	5,761	.....	.....
Church Groups	1	200	.....	.....
Community Clubs	17	1,659	24	1,839
Industrial Groups (men)	1	110	.....	.....
Industrial Groups (women)	3	142	14	693
Films				
Adult	68	13,891	16	1,609
Student	66	13,714	11	1,330
Exhibits and Slides				
Adult Boys' and Girls'	601	55,847	9	465
Total	1,751	142,263	490	37,139

The educational work has been carried on along many lines. The state health officer and deputy state health officers have assisted. The program for the adult public, women and girls' groups has been under the charge of Miss Martha Riley, Director of Social Work, who, together with Miss Aimee Zillmer, lectures to school groups. Dr. Valentine Gudex has lectured to groups of men and older boys during the greater part of 1922, and Mr. Frank Sherwood lectures to boys in schools, Y. M. C. A. groups, etc. The state has been extensively canvassed, clubs, colleges, schools, men's clubs and women's clubs have all been reached.

Placards and Booklets

Placards, booklets and pamphlets for free circulation are kept in quantities for distribution. Most of the pamphlets have been obtained from the U. S. Public Health Service.

There are on hand three exhibits for different groups: "The Venereal Menace" for the general public; "Keeping Fit" for the boys of high school age; "Youth and Life" for girls. We have about twenty-five sets in more or less constant use.

The following films are at hand:

Three copies of "The End of the Road."
Two copies of "How Life Begins."
One copy of "Anti-Vice."
One copy of "Kleinschmidt's Animated Drawings."
We also have a series of "Keeping Fit" slides.

Miss Riley has been on the road practically all of the time for three and one-half years with films and charts, reaching mothers and the adult public. The work of education has been very thoroughly carried out.

THE FOLLOWING IS A TABULATION OF THE CASES OF VENEREAL DISEASES AS REPORTED MONTHLY TO THIS BUREAU

MONTH	1921			1922		
	Gonorrhea	Syphilis	Chancroid	Gonorrhea	Syphilis	Chancroid
January	206	39	2	198	53	1
February	179	32	1	165	52	2
March	173	42	1	169	47	2
April	193	27	1	166	39	2
May	198	57	6	200	36	1
June	209	25	8	168	34	1
July	233	30	3	215	35	4
August	222	50	2	236	44	5
September	262	33	0	262	55	4
October	217	50	7	359	55	3
November	191	40	3	204	36	1
December	182	46	2	168	41	1
Total	2,465	471	36	2,510	527	27

THE CASES OF GONORRHEA, SYPHILIS AND CHANCROID, GROUPED ACCORDING TO CONJUGAL CONDITION, ARE AS FOLLOWS:

CONJUGAL CONDITION	1921			1922		
	Gonorrhea	Syphilis	Chancroid	Gonorrhea	Syphilis	Chancroid
Single	1,902	278	31	1,882	303	22
Married	535	175	5	589	200	4
Widowed	13	9	.....	24	13	.....
Divorced	15	9	.....	15	11	1

THE CASES OF GONORRHEA, SYPHILIS AND CHANCROID, GROUPED ACCORDING TO SEX, ARE AS FOLLOWS:

SEX	1921			1922		
	Gonorrhea	Syphilis	Chancroid	Gonorrhea	Syphilis	Chancroid
Male	1,931	294	31	1,968	338	25
Female	534	177	5	542	189	2

THE CASES OF GONORRHEA, SYPHILIS AND CHANCROID, GROUPED ACCORDING TO AGE ARE AS FOLLOWS:

AGE GROUPING	1921			1922		
	Gonorrhea	Syphilis	Chancroid	Gonorrhea	Syphilis	Chancroid
Under 5 years of age	16	5	.....	23	5	.....
From 5 to 10 years	11	9	.....	14	8	.....
From 10 to 15 years	16	9	1	10	5	.....
15 to 20 years	594	79	4	496	89	4
20 to 25 years	797	117	16	896	134	10
25 to 30 years	518	102	5	553	88	7
30 to 35 years	232	47	5	244	53	4
35 to 40 years	124	36	4	264	139	2
40 years and over	157	67	1	10	6	.....
Total	2,465	471	36	2,510	527	27

THE CASES OF GONORRHEA, SYPHILIS AND CHANCROID, FOR 1921, GROUPED AS TO SEX AND ACCORDING TO AGE, ARE AS FOLLOWS:

Age Grouping	Gonorrhea		Syphilis		Chancroid	
	Male	Female	Male	Female	Male	Female
Under 5 years of age	2	14	1	4	.....	.....
From 5 to 10 years	3	8	0	9	.....	.....
From 10 to 15 years	8	8	2	7	1	.....
From 15 to 20 years	381	213	36	43	3	1
From 20 to 25 years	680	117	70	47	13	3
From 25 to 30 years	434	84	75	27	5	.....
From 30 to 35 years	199	33	33	14	5	.....
From 35 to 40 years	94	30	28	8	3	1
40 years and over	130	27	49	18	1	0
Total	1,931	534	294	177	31	5

THE CASES OF GONORRHEA, SYPHILIS AND CHANCROID, FOR 1922, GROUPED AS TO SEX AND ACCORDING TO AGE, ARE AS FOLLOWS:

Age Grouping	Gonorrhea		Syphilis		Chancroid	
	Male	Female	Male	Female	Male	Female
Under 5 years of age	6	17	3	2	.....	.....
From 5 to 9 years	4	10	6	2	.....	.....
From 10 to 14 years	1	9	1	4	.....	.....
From 14 to 19 years	284	212	32	57	3	1
From 20 to 24 years	745	151	88	46	9	1
From 25 to 29 years	475	78	63	25	7	.....
From 30 to 34 years	220	24	35	18	4	.....
35 years and over	225	39	108	31	2	.....
Age not stated	8	2	2	4	.....	.....

Frequency of Venereal Disease

There are no better indications to the frequency of venereal disease in the population than that furnished by the two drafts in the late war. There were 5.6% venereally infected among one million men, but this was for the country at large and included the heavily infected negro population of the south. This figure is the sum total of those discoverable by the measures taken by the draft and represents cases of simultaneous standing and not a yearly rate. The examination rate for Wisconsin was 17.37 cases of gonorrhea per 1,000 men admitted, and 2.67 cases of syphilis and paresis per 1,000 men admitted. This is about two per cent of those examined. Applying this to the population as a whole it indicates a vast figure but as a matter-of-fact the age admission to the army was 18 to 30 years of age and the prior tabulation shows that more than half of all cases are within those years, and the majority of cases are in the male sex. The percentages, therefore, shown by the draft are very greatly in excess of the entire population. During the war an average of 10,788 officers and men were off duty daily, at home and abroad, because of venereal infection. So great a cause of invalidism is well worth the attention of sanitarians and the public.

Danger of Venereal Disease

Venereal disease is a leisure hour trouble. The responsibility for it is an individual matter and the alleviation of its frequency lies with local and state authorities. Morality statistics usually spare the individual and the family, and do not commonly report venereal diseases as a direct or complicating cause of death. We, however, know that syphilis especially is a prime cause of various degenerations of the tissues and that many lives are lost thereby and much incapacity for work results. The U. S. Public Health Service reports are responible for the statement that two large life insurance companies of New York, after operating a disability policy for ten years, found that 5.8 per cent of the claims paid were to persons dis-

abled by conditions well recognized as due to syphilis. It is estimated that ten to twenty per cent of the insane are syphilitic and the state contains hundreds of potential paretics marked eventually for the asylum.

Deputy State Health Officers

The law requires that all commitments to institutions for failure to follow-up treatment or to take treatment shall be made by the state health officer or deputy state health officer. In accordance with this the deputies have visited many cases in response to reports coming to this department, either to determine the existence of venereal disease or to arrange for proper treatment or to commit them to some institution. A number of individuals have been committed to Mendota and to the Industrial Home for Women at Taycheedah. Most of these were infected individuals whose incarceration was a benefit to the public. Through the deputies and social workers of the clinics there were placed in detention in 1921, seven male patients and 34 female patients, and there were caused to be hospitalized 28 male patients and 45 female patients; in 1922, there were placed in detention 10 males and 38 females and there were hospitalized 31 males and 33 females.

Results of the Work

The work on venereal disease has been in progress only for a short time. Any attempt to find results in mortality statistics would prove futile at the present moment, for deaths from venereal diseases are often the result of an infection of remote years back and organic derangements remain undiagnosed and unstated as to the true cause.

The State Board of Health is furnishing free arsphenamine whenever needed and the fact that arsphenamine plays a part in the quick sterilization of the individual gives rise to the belief that its prompt and wide use must lessen the sum total of syphilitic cases.

Education also has its effect upon many minds. In reply to a questionnaire, sixty-five college presidents have stated as the consensus of their opinion that the "college student of today is more circumspect in his conduct and has a more enlightened attitude toward all sex matters than his brother of an earlier day." The public at large is entitled to know the exact truth upon the matter.

To those who offer pessimistic arguments as to the value of preventive work, we may call attention to the fact that a considerable proportion of venereal disease cases reported to the State Board of Health are living in the married state and are thus capable of transmitting the disease to an innocent party; that also the long periods of disability and suffering in the individual are not recorded in any reports and remain hidden in secrecy to the outside world and that it is clearly a matter of humanity to do all reasonably possible to prevent suffering of the innocent. While recognizing the fact that human fallibility counterbalances many procedures which we are taking, nevertheless such measures should be continued whenever it is apparent that a result is obtained thereby. To allow a syphilitic

person to continually infect numbers of the opposite sex, as is often the case, should not be tolerated by any well-regulated community. The experience of the U. S. Army in handling venereal disease shows that results can be obtained. There is a hope that, like tuberculosis, the future will witness a decline in this class of disease.

REPORTS OF DEPUTY STATE HEALTH OFFICERS

SUMMARY OF WORK DONE IN DISTRICT NO. 1

From July 1, 1920 to June 30, 1922

Number	
21	General sanitary surveys
29	General surveys slaughterhouses
4	Special surveys slaughterhouses
28	Special surveys sewers, toilets and nuisances
3	Special surveys collecting vital statistics
3	Special surveys rendering plants
1	Special survey polluted water supply
10	Special surveys creamery waste
20	Special surveys scarlet fever
21	Special surveys smallpox
3	Special surveys measles
33	Special surveys diphtheria
1	Special surveys infantile paralysis
6	Special surveys whooping cough
8	Special surveys typhoid fever
10	Special surveys tuberculosis
8	Special surveys influenza
3	Special surveys chickenpox
2	Special surveys lethargic encephalitis
1	Special survey leprosy
9	Special surveys venereal disease
3	Special surveys septic sore throat
1	Special survey meningitis
2	Special surveys skin diseases
6	Special surveys neglected children
2	Special surveys housing conditions
6	Prosecutions for violating public health laws
1	Public health exhibit
3	Chest clinics
36	Health officer meetings
18	Public health committee meetings
59	Addresses on public health

SUMMARY OF WORK DONE IN DISTRICT NO. 2

From July 1, 1920 to June 30, 1922

Number	
32	General surveys public health units
18	Special surveys vital statistics
35	Special surveys scarlet fever
24	Special surveys diphtheria morbidity
100	Special surveys diphtheria mortality
4	Special surveys poliomyelitis
31	Special surveys smallpox
10	Special surveys typhoid fever
12	Special surveys tuberculosis
35	Special surveys venereal diseases
5	Special surveys commitments for same
15	Special surveys measles
12	Special surveys whooping cough
25	Special surveys chickenpox
1	Special surveys ophthalmia neonatorum
3	Special surveys maternity hospitals
5	Special surveys road building camps
1	Special survey soap & towels in public utility stations
2	Special surveys parochial schools
115	Special surveys public schools, rendering plants
	Special surveys slaughtering houses, toilets
	Special surveys nuisances public water supplies
	Special surveys miscellaneous matters
12	Special surveys organizations of boards of health
	Consultations and meetings with city councils village and township boards and clerks
25	Superintendents and trustees of institutions, boards of health and county health committees

SUMMARY OF WORK DONE IN DISTRICT NO. 3

From July 1, 1920 to June 30, 1922

Number
45 General sanitary surveys of cities and villages
29 Special sanitary surveys nuisances, toilets, etc.
40 Special surveys in re health organizations
4 Special surveys lumber camps
8 Special surveys vital statistics
18 Special surveys investigations venereal cases
2 Special surveys prosecutions venereal cases
6 Special surveys investigations influenza
40 Special surveys investigations diphtheria
28 Special surveys investigations diphtheria deaths
18 Special surveys investigations smallpox
21 Special surveys investigations scarlet fever
14 Special surveys infantile paralysis
3 Special surveys meningitis
17 Special surveys typhoid fever
10 Special surveys calls for diagnosis
1 Special survey of maternity home
8 Special surveys meetings, boards of health, etc.
23 Special talks parent-teachers meetings, etc.
1 Special investigation suspected disease in cheese maker
3 Special investigations nuisance at cheese factories
1 Special prosecution slaughterhouse
12 Special surveys rural and other schools
4 Special surveys of disease in schools, itch, etc.
1 Prosecution for not reporting disease
12 Special conferences and health meetings attended
1 Special investigation tuberculosis in paper mill
1 Special investigation chicken-pox in schools
Special schick test and toxin-anti-toxin in four communities
12 Special county health committee meetings attended
20 Special talks in schools
1 Special county nurse investigations
2 Special investigations t. b. in schools
1 Inspection pea cannery
1 Special survey in larger city
40 Special visits to perfect health organizations

SUMMARY OF WORK DONE IN DISTRICT NO. 4

From July 1, 1920 to June 30, 1922

Number
49 Surveys boards of health, meetings, organizations, etc.
16 Inspections, school buildings with health officer
7 Surveys of school toilets with health officer
12 School surveys with county superintendents of schools
9 School surveys with school boards
13 Schools surveys with county nurses
3 School surveys with teachers
17 Attendance county committees on health
60 Assisted health officer in diagnosis or quarantine
3 Special investigations with county nurses
23 Special conferences with committees
29 Special meetings with town and village boards and city councils
3 Sessions with Red Cross sections
3 Sessions with associated charities
4 Farmer institutes
1 Investigation city water supply
1 Investigation sewage construction
2 Investigations baby farms
1 Investigation lumber camps
1 Investigation defective death certificates
1 Investigation health of school bus driver
2 Investigations health board organization
3 Investigations complaint of neglected children

A-1

Number of schools where children were examined..... 37
Number of school children examined..... 817

Special Surveys for Diseases

Diseases	Number Surveys	Cases Examined
Smallpox	32	173
Scarlet fever	41	100
Whooping cough	5	9
Measles	1	4
Impetigo contagioso	8	47
Itch	6	11
Lice	6	47
German measles	1	1
Infantile paralysis	4	12
Influenza	7	15
Gangrene from Till plasters	5	5
Epilepsy	1	1

A-2

Diphtheria	37	115
Typhoid fever	9	18
Chicken pox	4	9
Eczema	3	5
Tuberculosis	8	8
Keratitis interstitialis	1	1
Trachoma	1	1
Venereal cases investigated		52
Venereal cases committed to state institutions by order of court		16
Venereal cases placed under treatment by order of court		15

Venereal Cases Investigated

Resulting in conviction for incests	2
Aided physician in diagnosis	16
Number of schick test examined	100

Public Addresses

Annual school meetings	1
Teachers institutes and school board conventions	34
Training schools	3
Schools—common, high, parochial, academies, normals	142
Public meetings	23
Nurses training schools	2
Hospital medical staff	1
County fair at fair grounds	1
County medical societies	7
Nurses training school W. A. T. A.	1
Meeting of butchers	1
Committees on public affairs	2
Talks to county boards	2
State board exhibits at fair grounds	2

Nuisances Investigated

Insanitary drill grounds	1
Slaughterhouses	13
Creamery and cheese factories	4
Stock yard	1
Insanitary buildings	5
Cesspools	1
Municipal dump	2
Manure piles	2
City sewage	1
Standing pools	3
Insanitary barn yard	1
Insanitary hide house	1
Defective sewer	4
Restaurant waste	3
Smoke nuisance	2
Insanitary R. R. toilet	1
Insanitary R. R. depot	1
Piggery nuisance	1
Garbage nuisance	1

Prosecutions Entered

Physicians not reporting communicable diseases	3
For leaving animals unburied	3
Heads of families for not reporting communicable diseases	6
Court petitions for venereal diseases	26
For practicing illegally as midwife	1
Midwife for failing to use prophylactic in eyes of baby at birth	1
Slaughterhouses nuisances	2
Aided dairy and food inspectors in prosecution	2

Miscellaneous

Aided in establishing city water and sewer system.
Circularized three counties with circulars on communicable diseases.
Aided in forming milk ordinances in two cities.
Made seven local health surveys.
Survey of all rural schools is Eau Claire, Monroe, Pepin and Jackson counties.
Survey of antitoxin in stations of 4th sanitary district.
Survey of Winnebago Indian settlement.

SUMMARY OF WORK DONE IN DISTRICT NO. 5

From July 1, 1920 to June 30, 1922

Nature of Survey	Number of Surveys Made
General sanitary surveys of health units	35
General surveys of slaughterhouses	5
Special surveys of slaughterhouses	7
Special surveys toilets, sewers, nuisances, etc.	34
Specail surveys polluted water supplies	10
Special surveys for influenza	16
Special surveys for typhoid carriers	9
Special surveys for tuberculosis	6
Special surveys for venereal diseases	12
Special surveys for diphtheria	19
Special surveys for scarlet fever	41
Special surveys for smallpox	37
Special surveys for infantile paralysis	4
Special surveys for leprosy	1
Special surveys for colitis or dysentery	3
Special surveys for measles	11
Special surveys for chickenpox	6
Special surveys for neglected children	12
Special surveys for insanitary dwellings	9
Special surveys for boarding houses	3
Special surveys for logging camps	18
Special survey theatre	1
Public addresses	39
Health conferences arranged	4
Meetings county health committees	33
School surveys	9
Child welfare special arrangements in counties	2
Publicity notices	29

ANTITOXINS AND SERUMS

The following is a tabulation of the diphtheria antitoxin, tetanus antitoxin, smallpox vaccine and anti-meningitis serum distributed by the State Board of Health during the calendar years of 1920 and 1921:

Diphtheria Antitoxin

1,000 units	1,078 packages
3,000 "	231 "
5,000 "	811 "
10,000 "	611 "

Tetanus Antitoxin

1,500 "	232 "
3,000 "	14 "
5,000 "	27 "

Smallpox Vaccine

1,591 "	5 tube packages
791 "	10 " "

6 packages anti-meningitis serum

REPORT OF THE BUREAU OF SANITARY ENGINEERING

July 1, 1920 to June 30, 1922

On page 130 of the State Board of Health report for the biennium ending June 30, 1920, a definite program for future development in the control of public water supplies, sewerage and waste disposal was outlined. This provided for quarterly inspection of all public water supplies secured from surface sources or depending upon purification, annual inspection of supplies from shallow wells and biennial inspections of deep well supplies. Sewage treatment plants were to be investigated once each year where there was not careful local supervision and otherwise as frequently as necessary to secure effective results. Specific complaints in regard to industrial wastes were to be investigated and where there was apparent serious stream pollution, voluntary investigations were to be made. The 1921 legislature, however, failed to make the additional appropriation necessary to carry out this program as a result of which the work has fallen far short of the aim therein outlined. Notwithstanding this handicap, there has been considerable progress. Essential improvements have been made on a number of public water supplies and in some instances new supplies have been developed. No constructive work has been done to secure effective operation of sewage disposal plants nor in regard to the disposal of industrial wastes. All complaints have been investigated, but in many cases, not as promptly as is desirable. In general, it may be stated that while specific complaints have been investigated, little constructive work has been done.

Personnel

Our regular personnel has consisted of State Sanitary Engineer, Chemical Engineer and Secretary. Accumulated funds allowed the employment of an additional engineer during the summers of 1920 and 1921, but not for the year 1922.

Summary of Work Done

A complete tabulation of the work done and activities of the Bureau of Sanitary Engineering may be found in the appended tables—public water supplies, Table II; sewerage, Table III; industrial wastes, Table IV; plans approved, Table V. A summary and classification of the activities, however, is given in Table I below:

TABLE I—NUMBER AND CLASSIFICATION OF INVESTIGATIONS

Subject	Number		Per cent of Total	
Water Supplies	83	.....	26.8	.....
Investigations	.....	71	.....	22.9
Plans Approved	.....	12	.....	3.9
Sewerage	55	.....	17.8	.....
Investigations	.....	29	.....	9.4
Plans Approved	.....	26	.....	8.4
Industrial Waste Investigations	171	.....	55.4	.....
Canneries	.....	33	.....	10.7
Coal Tar or Gas Plants	.....	3	.....	1.0
Milk Products	.....	120	.....	38.9
Miscellaneous	.....	6	.....	1.9
Packing and Rendering Plants, Tanneries	.....	5	.....	1.6
Paper and Pulp Mills	.....	4	.....	1.3
Total	309	309	100.0	100.0

There were in all 309 investigations, 55.4 per cent of which were in regard to industrial wastes, 38.1 per cent being with reference to milk product wastes alone; 26.8 per cent were in regard to water supplies and 17.8 per cent with reference to sewerage. These figures are approximately the same as prevailed in our previous biennial report.

By concentrating on public water supplies in the fall, after complaints with reference to industrial wastes have ceased, it has been possible to do some constructive work in the investigation of water supplies. It is significant, however, that the question of industrial waste disposal still predominates to the exclusion of proper and adequate work with reference to public water supplies and sewerage systems and this, notwithstanding the fact that investigation of industrial waste disposal are made only subsequent to specific complaints.

Typhoid Investigations

A brief summary of investigations of typhoid fever outbreaks made or taken part in by this bureau is given below:

Eau Claire: In August and September, 1921, eight cases of typhoid fever developed in the city of Eau Claire. A careful study of the epidemiology of the cases, together with an investigation and analyses of the public water supply, indicated that water was not the source of infection. Seven of the eight cases, however, assisted in serving at a banquet of the Wisconsin Pharmaceutical Association on August 3rd. All data pointed toward some infection received at this banquet. Questionnaires were later sent out to all of the 349 guests in attendance at the banquet. These questionnaires developed the fact that nineteen cases of dysentery developed among those in attendance, within a few days after the banquet. Two additional cases of typhoid were reported from other cities and it is significant that there were also reported twelve cases of dysentery or intestinal trouble which developed about three weeks after the banquet. It is possible that

some of the latter were also typhoid fever although mild cases. Raw food served at the banquet included lettuce and celery. The specific source of infection was not definitely determined, but it was doubtless some infected raw food shipped in or other food infected by a local carrier.

Fond du Lac: An outbreak of eleven or twelve cases of typhoid fever in Fond du Lac in March and April, 1922, was traceable to infection of the public water supply through an air lift booster system connected with one of the deep wells which supply the city with water. The booster and air lift are located below the surface of the street in a pit provided with concrete walls. A drain from the pit was connected with a main outfall sanitary sewer and the exhaust pipe of the booster pump was directly connected with a storm sewer for the purpose of eliminating the objectionable noise contingent with exhaust of the air. Early in March a flood interfered with the operation of the sanitary sewers and sewage backed up into basements in the vicinity. The bottom of the pit is seven or eight feet below the street surface and probably three or four feet lower than nearby basement floors. Flooding of the pit with sewage, therefore, undoubtedly occurred. Furthermore, the well had recently been put into operation and the pit, which was located practically in the gutter, was incomplete and provided with only a loose plank cover. Surface wash, therefore, found its way into the pit.

In order to determine whether there were leaks in the outer well casing, arrangements were made whereby air could be forced under pressure into the space between the outer casing and the air lift. This test disclosed very pronounced leaks where the booster is connected with the well casing. Further observations disclosed the fact that when the air lift was started in operation there was a distinct suction through these leaks or openings, probably due to the lowering of the water level in the well during pumping. Sewage in the pit would thus be drawn into the well. The exhaust pipe connected with the storm sewer was disconnected and dropped into a barrel partly filled with water. Forty minutes after shutting off the air supplying the air lift of the well the water was siphoned out of the barrel back into the bell or drum of the booster, thus demonstrating conclusively the possibility of pollution in this manner.

Recurrence of pollution has been prevented by eliminating all connections with the sewers, sealing the leaks in the well casing and providing the pit with a tight concrete cover.

Marinette: In the latter part of 1921 and early in 1922, some thirteen cases of typhoid fever developed in Marinette. These cases, however, occurred over a period of about five months, there being no pronounced peak in the outbreak. A careful study of the epidemiological data in cooperation with Dr. I. F. Thompson, formerly with the department, and an investigation of the public water supply, milk supplies, etc., failed to disclose any specific cause of the outbreak. Two possible factors, however, predominated, viz., occasional and slight infection of the water supply and infection of the milk supply.

A further study of the public water supplies and milk supplies, together with a search for carriers should be made to definitely locate the source of infection at Marinette.

Minocqua: Ten cases of typhoid fever developed in the village of Minocqua in September and October, 1921. An investigation disclosed the fact that the public water supply was taken from the lake without purification and that untreated sewage is discharged into the lake on either side of the intake. The evidence was quite conclusive that the public water supply was the cause of the disease. Chlorination of the supply was ordered and a liquid chlorine apparatus installed and placed in operation early in March, 1922. Since this time only one case of typhoid has been reported from this village.

Sheboygan: Typhoid fever has been somewhat endemic in the past in the city of Sheboygan. A careful study of the disease and an investigation of the public water supply indicated quite conclusively that the use of unpurified lake water, contaminated by the untreated sewage from the city itself, was the principal source of infection. Under date of January 27, 1921, therefore, the State Board of Health ordered the installation of apparatus for treatment of the city's water supply with liquid chlorine. After much opposition on the part of some local officials and citizens, a temporary apparatus was installed and placed in operation on June 22, 1921, and a permanent installation of automatic equipment placed in operation on September 1st, 1921. There were reported to this department sixty-nine cases of typhoid fever from the city of Sheboygan in 1921, fifty-nine of which occurred prior to sterilization of the city's water supply. In 1922 thirteen cases were reported. Typhoid fever death rates per 100,000 population, in the city of Sheboygan since 1909, have been as follows:

1909—23.0	1914— 7.1	1919— 9.9
1910—30.3	1915—14.0	1920—16.2
1911—11.2	1916—13.7	1921—28.7
1912— 7.3	1917—27.0	1922— 0.0
1913—18.0	1918—16.7	

Sturgeon Bay: Typhoid fever has been prevalent in this city for a number of years in the past. The public water supply was pumped from the bay without treatment until July 6, 1921, when chlorination was commenced. Sewage was discharged into the bay without treatment in close proximity to the water intake. The quality of the water was, therefore, questionable even after installation of the chlorinator. Local citizens realized this condition and used water from local wells for potable purposes rather than from the public supply. A flowing artesian well had been constructed by the city a number of years ago but this had never been connected with the system. Investigations of typhoid outbreaks were made in 1916, 1921 and 1922. The source of infection was traceable to the use of polluted water from the local wells in each instance.

In 1916 local wells were polluted by the cess pool of a hospital which had previously received typhoid patients. In 1921, the in-

fection was traceable to pollution of wells by a public sewer leading from this same hospital to the bay. That the sewer was loosely constructed was apparent from the fact that during dry weather practically no sewage discharged at the outlet, the sewage evidently finding its way into openings and crevices of the limestone formation on which the city is situated. The typhoid occurred among people using water from wells located on streets adjacent to this sewer, and about one month prior to the outbreak six cases of typhoid were entered at the hospital. A complete report, together with an order issued December 14, 1921, required:

(1) That in regard to development of the public water supply—

(a) The city secure testing apparatus and pump the artesian well to determine more definitely its capacity and that the results of this test be reported to the State Board of Health not later than March 1, 1922.

(b) If this test indicates an adequate capacity, air lifts and a receiving reservoir of not less than 50,000 gallon capacity be installed and placed in operation not later than June 1, 1922, and that the artesian well water only be pumped into the distribution system under all normal conditions.

(c) The chlorine apparatus be held in reserve and kept in operating condition at all times and that should it at any time become necessary to pump water from the bay into the distribution system, the water be sterilized with liquid chlorine, and the public be notified to boil the water before using.

(d) Steps be taken at the earliest possible date to so augment this supply as to make unnecessary the use of water from the bay at any time.

(2) That notice be published to boil all water used for drinking purposes until a safe public supply is provided.

(3) That all citizens adjacent to the water and sewer system be required to connect therewith and eliminate all outside toilets and cess pools.

This order, however, was not promptly carried out and typhoid again became prevalent in the spring of 1922, forty cases having been reported prior to July 1. A representative from this Bureau and one from the Bureau of Communicable Disease went to Sturgeon Bay and remained there during practically all of the month of June. Rigid corrective measures were inaugurated. Careful examinations and analyses were made of all local wells and those found polluted were closed. Hotels and restaurants were required to secure their water for drinking purposes from wells which were known to be safe. Immediate steps were taken by the city to develop the deep well supply and abandon the lake supply at the earliest possible date.

Green Bay: Factory Supply—An outbreak of some thirty-one cases of typhoid fever occurred among employes and relatives of employes of a factory in Green Bay. A careful investigation and sanitary survey of the factory water supply indicated a local well as the source of infection. The contaminated well was ordered closed. The em-

ployes affected claimed compensation under the Workmens' Compensation Act. This was contested by the company, but the Industrial Commission issued an order under date of June 6, 1922, allowing compensation to those employes who contracted the disease. (*Vander Leest vs. John Hoberg Co.*, Workmen's Compensation, 10th Annual Report, Page 59).

Water Supply Investigations

Table No. II appended summarizes all investigations made of public water supplies. In a number of places municipalities have developed or are securing new public water supplies and in others essential improvements have been made. Black River Falls and Eagle River are developing new supplies. Blair and Viroqua have abandoned wells found polluted and developed new well supplies. Menomonie has abandoned an unfiltered and questionable lake supply for deep wells. Waupaca has abandoned a questionable lake and river supply for a safe well supply. The following list shows the places and dates of installation where liquid chlorine is being used for sterilization of public water supplies in the state.

Appleton	4- 1-21
	12- 9-19
Ashland	8-13-20
	3-15-19
Bayfield	5-11-20
Cudahy	8-20-20
	7-15-20
Eau Claire	10-11-21
(Emergency)	10-10-21
Ephraim (Private)	7-14-21
Hayward	5-17-16
Kenosha	1-24-17
Mellen	5-16-17
Menasha	6-22
Menomonie (Emergency)	11-19-19
Milwaukee	4-20-21
	1-24-18
Minocqua	2-22
Neillsville	5-14-18
Oshkosh	8-30-17
Portage	7-22
Port Washington	6-22
Racine	3-22
Rhinelander	11-18-19
Shawano	11-22-19
Sheboygan	6-16-21
	7-29-21
	8- 9-21
	7-30-21
South Milwaukee	9-10-15
	6- 5-20
Sturgeon Bay	6-14-21
Superior	3-18-21
(Emergency)	4-28-21
Two Rivers	8-27-15
	7-25-19
Washburn	9-10-18

Sewerage Investigations

Table No. III appended briefly summarizes all investigations made in regard to sewerage. Delavan, Plymouth and Ripon have constructed, or have in the process of construction, new sewage treatment plants. It is to be regretted, however, that systematic investigations of existing sewage disposal plants have been impossible, those reported having been made only subsequent to complaint or specific information indicating unsatisfactory conditions. It is generally believed that very few of the treatment plants of the state are being effectively operated. More effective supervision is, therefore, necessary if satisfactory results are to be secured.

A rather interesting and unusual investigation in regard to sewage was made at Fond du Lac. An explosion occurred in a stone tun-

nel sewer, used mainly as a storm water sewer, which blew up the sidewalk and damaged the pavement for a distance of about two blocks. Several houses were also damaged. Paralleling the sewer and passing through it at two places was a gas main. A careful investigation showed that the odor of illuminating gas had been prevalent in the streets and buildings in the vicinity for some time prior to the explosion. Although no definite conclusion was drawn as to the manner in which the gas in the sewer may have become ignited, it was concluded that the cause was the explosion of illuminating gas which had found its way into the sewer.

Industrial Waste Investigations

In Table No. IV appended have been tabulated the places where investigations have been made with reference to industrial waste disposal. In all cases orders have been issued or definite instructions given regarding necessary improvements. In most cases, for the smaller plants, definite plans have been provided. It has been impossible to follow up this work to determine whether the orders or recommendations have been carried out in all cases but the complainant has been furnished copies of orders or recommendations made and requested to notify the department should conditions not be improved. In only a few cases have such notices been given us. It is believed, therefore, that in the main, our recommendations are being carried out and that they are effective in eliminating the objectionable conditions that are found to exist.

Special studies were made at Columbus and Astico in regard to the disposal of canning plant wastes. At Columbus a Dorco screen was installed and operated in cooperation with the Columbus Canning Company and Dorco Engineering Company. Parallel or comparative tests were made with results from a two hour detention tank at Astico. The conclusions of the report upon this work were as follows:

(1) The volume of waste produced at the different plants varies greatly, ranging approximately as follows:

(a) Floor and produce washings—average flow per twenty-four hours, 60,200 to 183,000 gallons per 50,000 cans, while the maximum flow is at times nearly double the average.

(b) Cooling water—average flow per twenty-four hours, 18,000 gallons to 75,400 per 50,000 cans, with maximum about 50 per cent greater.

(2) The amount of suspended matter removed by the screens amounts to about 500 pounds of screenings containing about 88½ per cent moisture, per 50,000 cans, while that removed by the tank amounts to about 1,295 pounds per 50,000 cans; the per cent moisture of the suspended matter removed from the tank, however, was not determined, but is probably higher than in the screenings.

(3) The screen as operated should remove from 35 to 40 per cent of the suspended matter, while the tank should remove approximately 90 per cent.

(4) Difficulties encountered in the operation may be overcome—

(a) In the screen by proper backing of the fine mesh screen with heavier material to eliminate this difficulty and by the construction of a suitable belt conveyor or other device for removing the screenings from the settling chamber.

(b) In the tank by removing the suspended matter daily. This, however, is a disagreeable task and one that is quite apt to be neglected.

(5) In general it may be said that the screen removes a majority of the objectionable suspended matter immediately without allowing it to stand in contact with the liquor and thus go into solution or become stale. Furthermore, a screen properly developed, for automatically removing the screenings from the settling chamber, eliminates the objectionable task of removing the sludge and scum from the settling tank.

It is probable, however, that the tank, if properly attended, will produce an effluent less apt to create objectionable conditions than that from the screen, although the organic matter in solution and the more stale character of the tank effluent many partially eliminate the effect of the greater efficiency. Very effective treatment can doubtless be secured by passing the wastes first through a screen, then through a tank. By this method the finer suspended matter would be removed by the tank, yet the screen could probably remove a sufficient amount to make unnecessary such frequent cleaning of the tank, in fact it might be necessary to clean the tank only at the end of the canning season.

Considerable research work has been done at the Madison plant of the United States Sugar Company in regard to disposal of beet sugar plant wastes. Experiments were made with the activated sludge process, plain sedimentation and lime precipitation. While the experiments demonstrated that, with the Steffins house waste eliminated, effective treatment could be secured by the activated sludge process, it was decided after a careful study of the situation, that a less expensive method would produce satisfactory results. A Dorco screen was installed to remove the suspended matters from the battery and Steffins-house wastes. The effluent from the screen was lagooned in a somewhat smaller pond than had formerly been used. A separate pond was provided to receive the lime sludge waste. These improvements, together with better care of the ponds, have resulted in material improvements over the former methods of disposal and it is believed that the serious and more objectionable stream pollution has been eliminated. It is possible, however, that further modifications consisting of elimination of the Steffins waste, either by evaporation and recovery of potash or by selling the molasses for stock food, also removal of the lime sludge by the dry process rather than by the use of water as a carrier, will be necessary to secure more effective purification in the future.

Finances

In Table No. V appended will be found a complete financial statement. It will be noticed that in the two years $1,357.53 more than the appropriation was spent. This was possible because of the fact that the work was commenced in September, 1919, while the original appropriation was made available July 1, of the same year, thus providing some accumulated funds. The balance on hand at the close of the fiscal year, June 30, 1922, of $614.87, however, is so low that even our present program cannot be maintained unless additional funds are made available.

Conclusions

In concluding, attention should again be called to the program for future development recommended on page 130 of the preceding Biennial Report. It is believed that unless this program can be substantially carried out, adequate and effective control of public water supplies and sewerage systems cannot be maintained, notwithstanding the fact that Sections 1407m—1 to 1407m—4 of the Statutes state that "It (The State Board of Health) *shall* investigate all sources of water or ice supply and all water or sewerage systems and sewage or refuse disposal plants and keep complete records of all such investigations." To carry out this program will require 330 investigations of public water supplies, 100 sewerage systems and 93 in regard to industrial waste, or a total of 523 investigations annually. There was actually made only 83 investigations of public water supplies, 55 of sewerage systems and 171 of industrial wastes, or a total of 309, during the two years of this biennial period, an average of 154.5 investigations annually, which is only 29 per cent of the actual number of investigations that should be made each year. It seems quite apparent, therefore, that material extensions are necessary in the activities of this Bureau if proper sanitary conditions with reference to water supplies, sewerage systems and industrial waste disposal are to be maintained and if the State Board of Health is to fully carry out the requirements of Sections 1407m—1 to 1407m—4 of the Statutes.

TABLE II—WATER SUPPLY INVESTIGATIONS

July 1, 1920, to June 30, 1922

Note: The following table briefly summarizes water supply investigations. The third column, "Subject," indicates the nature of the investigation, while the statements in the last column suggest the conditions found to exist, the recommendations made or action taken. All are public supplies except where otherwise indicated.

Place	Date of Report	Subject	Condition, Recommendation, Action Taken
Ashland	Feb. 25, 1922	Sanitary quality	Supply safe. Monthly analyses.
Bayfield	Feb. 9, 1922	Sanitary quality	Filteration and sterilization; increase chlorine to .25 p.p.m. Develop sewage treatment.
Beaver Dam	May 4, 1922	Sanitary quality	Modification in method of sewage disposal from toilet at plant. Monthly analyses from each well.
Black River Falls	May 12, 1921	Sanitary quality	Recommended immediate chlorination and early development new supply.
Blair	Oct. 27, 1921	Sanitary quality	Chlorinate present supply; develop new supply.
Birnamwood	May 27, 1921	Sanitary quality	Ordered that oils be prevented from entering the pump; that capacity of old well be determined; if old well proves unsatisfactory engineer submit plans for new supply.
Burlington	Dec. 21, 1921	Sanitary quality	Well No. 4 contaminated; take steps to protect it at once.
Cashton	Mar. 28, 1922	Sanitary quality	Extend sewer to accommodate residents about pumping station; Monthly analyses.
Clintonville	Nov. 15, 1920	Sanitary quality	Recommended that river intake be disconnected; additional pump installed and abandon old supply.
Columbus	June 1, 1922	Sanitary quality	Iron in water; flush mains each week; connect dead ends. Monthly analyses.
Corliss	Dec. 8, 1920	Sanitary quality	Frequent analyses.
Corliss (R.R.)	Nov. 24, 1920	Sanitary quality	Protect each storage tank with wooden plank cover. Remove oil in west tank at water line. Fill abandoned cess pool with soil.
Cudahy	Feb 7, 1922	Sanitary quality	Develop filtration and sterilization; control chlorine application by analyses for excess. Develop sewage treatment.
Eagle River	Jan. 30, 1922	Sanitary quality	Abandon river and develop ground water supply.
Edgerton	Jan. 27, 1922	Sanitary quality	Supply satisfactory; monthly analyses.
Green Bay (Private)	Feb. 16, 1922	Typhoid and sanitary quality	Pollution of well No. 1; abandon well.
Hartford	Mar. 17, 1922	Sanitary quality	Abandon emergency intake; monthly analyses.
Hartland (Private)	April 22, 1921	Sanitary quality	Develop new well.
Hayward	April 20, 1922	Sanitary quality	Ordered to secure services consulting engineer to prepare and submit plans by August 1, 1922. Place chlorine apparatus in operation at once; secure extra parts and report monthly to de; partment. Monthly analyses connect residences with sewers
Hurley	Nov. 5, 1920	Quality of supply and development	Recommended services of consulting engineer to develop new supply.

TABLE II—WATER SUPPLY INVESTIGATIONS—Continued.

Place	Date of Report	Subject	Condition, Recommendation, Action Taken
Iron Belt	Mar. 17, 1922	Sanitary quality	Protect well from surface wash by concrete wall; monthly analyses.
Iron River	Mar. 13, 1922	Sanitary quality	Abandon river intake. Monthly analyses.
Janesville	Feb. 2, 1922	Sanitary quality	Monthly analyses. Construct sewers in vicinity of C. I. pipe.
Juneau	Mar. 13, 1922	Sanitary quality	Monthly analyses; connect residences in vicinity of well with sewers.
Kenosha	Jan. 31, 1922	Sanitary quality	Develop sewage treatment.
La Farge	Mar. 18, 1922	Sanitary quality	Drain from reservoir. Prohibit outside taps. Monthly analyses. Extend sewers to residents in vicinity of wells.
Marinette	April 6, 7 & 8. 1920	Typhoid and sanitary quality	Water supply safe.
Marshfield	April 18, 1922	Sanitary quality	Monthly analyses from different sources.
Mayville	Mar. 13, 1922	Sanitary quality	Monthly analyses.
Mellen	Mar. 21, 1922	Sanitary quality	Chlorine application April 1 to Oct. 1; monthly analyses.
Menasha	April 24, 1922	Sanitary quality	Ordered to develop pure supply either by filtration and sterilization or from ground water and submit plans. Install chlorinator by July 1, 1922.
Menomonie	Mar. 13, 1922	Sanitary quality	Monthly analyses.
Milton Jct.	Nov. 22, 1920	Sanitary quality	Recommended improvement in sanitary conditions about well and oil be drained from receiver daily. Monthly analyses.
Mineral Point	June 7, 1922	Sanitary quality	Chlorinate existing supply; develop new supply. Install sewage.
Mondovi	Mar. 15, 1921	Sanitary quality	Monthly analyses.
Monroe	Aug. 28, 1920	Sanitary quality	Monthly analyses.
Milwaukee	Nov. 20, 1920	Taste and odor	Caused by gas plant wastes. Modification made in method of waste disposal.
Mt. Horeb	Mar. 17, 1922	Sanitary quality	Connect residence near well with sewers. Monthly analyses.
Neenah (Private)	April 14, 1922	Sanitary quality	Unsafe well supply; railroad use city water for coaches.
Neillsville	April 13, 1921	Sanitary quality. chlorinator	Chlorinator out of commission due to accident. Install duplicate apparatus; use 0.3 p.p.m. Flush dead ends of systems regularly. Monthly analyses of raw and filtered water.
Nekoosa	April 11, 1922	Sanitary quality	Abandon emergency intake at once. Monthly analyses.
New Richmond	Mar. 13, 1922	Sanitary quality	Monthly analyses.
Oconomowoc	May 3, 1922	Sanitary quality	Safe; monthly analyses.
Omro	Mar. 18, 1921	Installation of waterworks	Talk at mass meeting.
Osseo (RR)	Mar. 16, 1922	Sanitary quality	Certified.
Phillips	Sept. 22, 1920	Sanitary quality	Recommended immediate chlorination and early development of new supply, or filtration of present supply.
Platteville	Mar. 19, 1921	Sanitary quality	Well No. 1 again be placed in service. Analyses every two weeks.
Sturgeon Bay	Mar. 8, 1921	Sanitary quality	Talk to Commercial Club regard water supply development.
Sturgeon Bay	Dec. 12, 1921	Typhoid and sanitary quality	Ordered to test capacity of deep well and report by March 1, 1922. If capacity adequate, install air lifts and develop supply by June 1, 1922. Notify public to boil water pending development. Require connections with water and sewerage systems.

TABLE II—WATER SUPPLY INVESTIGATIONS—Continued.

Place	Date of Report	Subject	Condition, Recommendation, Action Taken
Sturgeon Bay	May 17, 1922	Sanitary quality	Conference with city officials re-development.
Sun Prairie	April 22, 1922	Sanitary quality	Monthly analyses.
Washburn	Mar. 2, 1922	Sanitary quality	Apply .25 p.p.m chlorine. Consider providing filtration. Monthly analyses. Consider sewage treatment.
Watertown	Mar. 14, 1922	Sanitary quality	Monthly analyses.
Waukesha (Private)	May 11, 1922	Sanitary quality	Sterilize present supply pending development of new supply.
Waupaca	Mar. 30, 1921	Sanitary quality	Chlorinate existing supplies and secure consulting engineer to develop new ground water supply.
Whitehall	Mar. 16, 1922	Sanitary quality	Ordered to install chlorinator by June 1, 1922. Consider development of new supply.
Wisconsin Rapids	Oct. 4, 1921	Sanitary quality	Double check valve on cross connection. Abandon river intake; provide sewerage.
Port Edwards	April 20, 1922	Sanitary quality	Abandon old river supply when new ground water development is completed. Monthly analyses.
Port Washington	Feb. 1, 1922	Sanitary quality	Ordered duplicate apparatus for sterilization by May 1, 1922. Ultimate filtraton. Sewage treatment when practicable.
Prescott	June 1, 1922	Sanitary quality	Monthly analyses.
Rhinelander	May 11, 1921	Chlorination of supply	Chlorinator adjusted to deliver .4 p.p.m.
Rhinelander	May 3, 1922	Chlorination of supply	Arranged for o'tolodin tests and analyses.
Ripon	July 25, 1921	Sanitary quality	Protect wells at pumping station from surface drainage; lay 40 foot iron pipe where tile line crosses creek. Analyses from gallery, one at manholes 1, 2, 3 and well No. 3 after repairs.
River Falls	July 1, 1921	Sanitary quality	Consider development of spring for supply; analyses of wells No. 1 and 2 monthly.
Shawano	Oct. 22, 1920	Operation chlorinator	Adjusted chlorinator to deliver .45 p.p.m.
Shell Lake	Jan. 9, 1922	Sanitary quality	Pending development new supply, chlorinate existing supply. Monthly analyses.
South Madison (School Supply)	April 18, 1921	Sanitary quality	Develop new well supply.
South Milwaukee	Feb. 8, 1922	Sanitary quality	Install scales for checking chlorinator. Monthly analyses. Consider sewage treatment.
Spooner	April 21, 1922	Sanitary quality	Abandon emergency intake. Monthly analyses.
St. Croix Falls	Mar. 16, 1922	Sanitary quality	Monthly analyses.
Sturgeon Bay	Aug. 9, 1920	Sanitary quality	Conference with officials re development new supply.
Sturgeon Bay	Feb. 17, 1921	Sanitary quality	Conference with water committee re sanitary quality. Recommended services consulting engineer; install chlorinator and develop ground water supply. Chlorinator installed July 6, 1921.

TABLE III—SEWERAGE INVESTIGATIONS AND STREAM POLLUTION

Note: The following table briefly summarizes the sewerage investigations. The third column "subject," indicates the nature of the investigation, while the statements in the last column suggest the conditions found to exist, the recommendations made or action taken. All are of public systems except where otherwise indicated.

Place	Date of Report	Subject	Condition, Recommendation, Action Taken
Augusta	Oct. 5, 1921	Development of sewerage	Advised tank treatment.
Bayfield (Sanatorium	Oct. 13, 1921	Disposal	Plans prepared; septic tank. 3 distributing wells, 3 filter trenches, 3 dry wells and outlet to creek.
Belgium	Sept. 6, 1921	Pollution drainage ditch	Advised develop public system in cooperation with industries.
Benton	Mar. 9, 1921	Development of sewage	Talk at mass meeting.
Columbus	Aug. 11, 1920	Tank needed cleaning	Care in operation, connect residence with system.
Cumberland	May 10, 1921	Location of outlet	New location of disposal approved.
Clintonville	Nov. 16, 1920	Sewage disposal	Development of plans including sewers and ultimate treatment.
Deerfield (Private)	Sept. 20, 1921	Cesspool nuisance	So operate and clean as not to create objectionable condition.
Elkhart Lake	Aug. 2, 1921	Insanitary conditions	Improve filters and clean nozzles.
Fond du Lac	Feb. 27, 1922	Gas explosion	Greater care in locating and stopping gas leaks in mains. Substitute pipe for tunnel sewer; disconnect sanitary from storm sewers.
Green Bay	July 29, 1921	Excessive growth of algae in ponds	Apply 8 lbs. copper sulphate per million gallons of water twice a year; cut weeds.
Hartford	July 30, 1920	Pollution of Rubicon River	Secure engineer to draw plans for treatment plant.
Hayward	May 4, 1921	Inadequate sewerage	Secure engineer—extend outfall sewer. develop plans.
Hayward	April 17, 1922	Inadequate sewerage	
Hazel Green (Private)	July 29, 1921	Objectionable conditions	Install filter trench.
Hudson	June 2, 1922	Stream Pollution	Establish bathing beach at either of two designated sites.
Jackson	Aug. 23, 1921	Stream Pollution	Remodel west sewage treatment tank.
Lomira	July 21, 1920	Stream Pollution	Extend box drain to creek or discharge no washings into it. Extend brewery drain directly to creek. Protect pond by ditch and embankment.
Mayville	Aug. 2, 1921	Unsatisfactory conditions	Close by-pass. Use lime in creek bed. Clean tanks; local treatment of creamery wastes. Submit plans for new treatment plant January 1, 1922, and construct by July 1, 1922.
Plymouth	Oct. 21, 1921	Unsatisfactory sewage disposal	Prepare plans and construct treatment plant within 2 years
Thorp	Aug. 23, 1921	Stream pollution	Ordered to prepare plans for treatment, tank and filters by January 1, 1923, and constructed by July 1, 1923.
Menomonie (Dunn Co. Asylum)	July 8, 1921	Unsatisfactory disposal	Secure engineer to design disposal plant.
Neillsville	Oct. 4, 1921	Cesspool overflowing	Extend and connect with public sewer.
Princeton	Dec. 10, 1920	Odors at sewer outlet	Extend sewer to river.
Ripon	Sept. 29, 1920	Unsatisfactory treatment	Clean filter bed; remove sludge from tank.
Sun Prairie	Sept. 26, 1921	Complaint re stream pollution	Remove sludge from tank frequently.
Vesper	Dec. 13, 1920	Inadequate sewerage	Authorize engineers to prepare plans for separate sewerage system. Tank treatment.
Wausau	Sept. 2, 1921	Nuisance at outlet from city sewage discharged into edge of Wisconsin River	Extend outlet into deeper water. Packing plant connected with sewer to provide local treatment.
Wilton	Aug. 23, 1920	Inadequate sewerage	Develop plans for sewerage with tank treatment.

TABLE IV—INDUSTRIAL WASTE INVESTIGATIONS

Note: Below are listed the places where investigations have been made regarding the disposal of different types of industrial waste. In each case recommendations were made or orders issued regarding the operation or remodeling of the existing plant or definite plans were prepared or outlined for a new plant by the bureau.

CANNERIES

Albany
Astico (2)
Beaver Dam
Bloomer (2)
Boyd
Cambria
Chilton
Colby
Franksville
Fredonia
Glen Flora
Holmen
Jackson
Lowell
Markesan
Mequon
Oakfield
Randolph (2)
Reeseville (2)
Saukville
Sheboygan Falls
S. Beaver Dam
S. Randolph
Sun Prairie
Templeton
Thorp (2)
Waterloo
West Bend

COAL TAR DERIVATIVES

Beaver Dam
Ft. Atkinson
Oshkosh

MILK PRODUCTS

Cheese Factories

Abbottsford
Bear Creek
Beaver Dam (2)
Bloomer
Burke
Cadott
Calamine
Cambria
Campia
Cascade
Chili
Dodgeville
Friesland
Greenbush (2)
Hartford (2)
Hillsdale
Hingham
Hixton
Holland
Hollandale
Hortonville
Humbird
Joel
Kilbourn
Loyal (3)
Lyman
Marshfield
Mosinee
Mt. Hope
Oakfield
Omro
Oostburg (2)
Platteville
Randolph
Rice Lake (2)
Richland Center
Rosendale
Rush Lake
Saukville
Sheboygan Falls (3)
Sherman Center
Thorp
Turtle Lake
Two Rivers
Verona
W. Middleton
Wheeler

Creameries

Alma Center (2)
Allenville (5)
Almond
Beaver Dam
Bellinger
Benoit
Brookfield
Blue River
Burlington
Cedar Grove
Cedarburg
Curtiss
Deansville
Delavan (2)
De Forest
Delafield
Elk Mound
Ellsworth
Fennimore
Fond du Lac (2)
Frederic
Hartford (2)
Hanover
Holmen
Hortonville
Jackson
Kennan
Kenosha
Lake Geneva
Logansville
Madison
Marshfield
Medina
Milton Jct.
Mt. Horeb
Neillsville
Packwaukee
Patch Grove
Ripon
Shell Lake
Union Center
Walworth
Webster

Condenseries

Burlington
Chilton
Denmark
Johnson Creek
Markesan
Menomonee Falls
Middleton (2)
Oconomowoc
Stratford
Thiensville
West Bend
West Rosendale

Packing, Rendering Plants and Tanneries

Ft. Atkinson
Racine
Rib Lake
Shawano
Sheboygan

Miscellaneous

La Farge
Madison
Menomonee Falls
Milwaukee
Ripon
Stoughton

Paper and Pulp Mills

Green Bay
Menasha
Peshtigo
Stevens Point

TABLE V.—PLANS APPROVED

Note: The following table lists the plans approved for waterworks and sewerage. The third column indicates the extent of the plans and the fourth briefly outlines the special conditions under which they were approved. All plans are for public systems except where otherwise indicated.

Place	Date of Approval	Plans Provide For	Special Conditions of Approval
		Water Supplies	
Blue Mounds	May 31, 1922	Waterworks, fire protection only	If supply proves inadequate further development required.
Cedarburg	Oct. 7, 1920	Waterworks	Consider use 4-inch instead of smaller mains. Install duplicate pump when necessary.
Delavan	June 5, 1922	New well	Cover gravel placed about casing with clay; grade so that ground slopes from well and raise concrete floor at openings.
Iron Ridge	Mar. 7, 1922	Waterworks	Details of well and pumping equipment to be submitted for approval.
Kewaskum	Feb. 10, 1922	Waterworks	Submit plans if supply is developed from different source than indicated.
Kimberly	May 4, 1921	Waterworks	None
Plover	Feb. 5, 1921	New system	Additional protection if necessity indicated by inspection.
Prairie du Chien	Aug. 10, 1921	New source of supply and pumping equipment	Modifications required in treatment of sewage from pumping plant.
Prescott	April 4, 1922	Extension to system	None
River Falls	Aug. 10, 1921	New source of supply	Provide necessary toilet facilities.
Two Rivers	May 11, 1922	New intake into Lake Michigan	Chlorination required and ultimately filtration.
Waukesha (Private)	June 14, 1922	New well	So connect well with pump as to prevent pollution.
		Sewerage	
Appleton	Mar. 23, 1922	Sewerage for lower fourth ward	Place manholes not further than 400 feet apart. Submit plans for treatment tank.
Brillion	April 12, 1922	Imhoff tank	Additional treatment required two years after installation.
Cedarburg	Oct. 7, 1920	Sewer system, tank, filters	Place manholes not further than 400 feet apart; provide additional purification if necessary.
DeForest	May 27, 1922	System of sewers with treatment tank	Place "L" at end of inlet pipe to divert flow toward center of tank; baffle to secure more uniform flow; place scum board in front of overflow weir; provide lock for by-pass and install modern filter when roughing filter becomes ineffective.
Delavan	June 5, 1922	Sewage treatment	Consider providing reversal of flow through primary settling tanks; provide by-pass with lock Additional units to be installed when necessary.
East Troy	Nov. 10, 1921	Sanitary sewers	Consider deepening sewer on W. Main St.; place manholes not further than 400 feet apart; provide and submit plans for treatment.
Ellsworth	Aug. 10, 1921	Sanitary sewers, tank, filters	Install additional filters for District No. 1 and filters for District No. 2 when necessary; also lock be provided for by-pass.
Iron Ridge	Mar. 7, 1922	Sewer system	Place manholes not further than 400 feet apart. Submit plans for treatment plant.
Jefferson	April 27, 1922	Extension to sanitary sewers	Place manholes not further than 400 feet apart.

TABLE V—PLANS APPROVED—Continued.

Place	Date of Report	Subject	Condition, Recommendation, Action Taken
Johnson Creek	July 26, 1921	Modifying and enlarging treatment tank	Disconnect roof leaders; milk condensary wastes treated separately if necessary.
Juneau	May 14, 1921	Sanitary sewers; tank treatment	Place manholes not further than 400 feet apart; leave openings in baffles of septic tank to allow free circulation of air.
Kewaskum	Feb. 10, 1922	Sanitary sewers	Place manholes not further than 400 feet apart; submit plans for treatment plant.
Kiel	Sept. 15, 1921	Intercepting sewer for S. W. section	Employ engineer to prepare plans for system and ultimate treatment.
Kimberly	May 4, 1921	Sanitary sewers, tanks	Increase grades for 8-inch sewers to 30 per cent; house laterals to be 6 inches; insert gate valve in by-pass. Provide under-drains for sludge bed if necessary.
Milwaukee (Met. Sew. Com.)	May 29, 1922	Interceptor	Properly operated and maintained. Exclude storm water from system.
Mosinee	Sept. 17, 1921	Extensions and modifications to existing system	Connect no catch basins with system; treat sewage at as early a date as possible.
Oconto Falls	Aug. 9, 1921	Sanitary sewers for western section	Extend outfall sewer to river.
Oostburg	Sept. 14, 1921	Outfall and tank	If clear water from condensery and canning plant over load system, dispose of it separately; if tank treatment ineffective, install filters. Place manholes not further than 400 feet apart; submit plans for treatment tank.
Plymouth	Feb. 10, 1922	Tanks filters and outfall sewer.	Tank only may be installed leaving filters till later date, Provide sand for surface of sludge bed.
Port Washington	Sept. 15, 1921	Extensions	Submit plans for complete system.
Preble	June 13, 1922	Sanitary sewers	Increase grade of sewers. Place manholes not further than 400 feet apart.
Shullsburg	Nov. 8, 1921	Sanitary sewers	Place manholes not further than 400 feet apart; provide treatment tank and outfall sewer; submit plans.
St. Croix Falls	Jan. 6, 1921	Sanitary sewers and tanks	Consider increasing size of outfall to 10 inches.
Two Rivers	Mar. 20, 1922	Remodeling system and extensions	Consider treatment at early date.
Waupun	Mar. 18, 1921	Modifying and adding to treatment tank	More complete treatment may be required later.

BUREAU OF SANITARY ENGINEERING

Financial Statement—from July 1, 1920 to June 30, 1921.

MONTH	Salaries	Traveling Expenses
July	$ 900.86	$ 294.44
August	911.66	275.08
September	911.66	286.95
October	657.86	94.13
November	641.66	110.10
December	673.66	69.12
January	641.66	83.77
February	641.66	65.61
March	641.66	134.56
April	651.66	115.71
May	651.66	136.36
June	651.74	182.39
Total	$8,577.40	$1,803.22

Miscellaneous Expenditures.

MONTH	Stationery and Office Supplies	Postage	Printing and Miscellaneous
July	$ 7.77	$10.00	$98.22
August	11.05	8.00	11.12
September	5 95	15.00	28.00
October	6.29	.....	3.00
November	4.10	.....	.....
December	1.81	.....	16.70
January	3.90	.....	1.52
February	7.14	.....	1.96
March	1.31	10.00	6.75
April	6.31	.....	9.20
May	.99	.....	6.67
June	18.02	.....	.....
Total	$74.61	$43.00	$183.14

On Hand July 1, 1920	$11,972.00
Total Expended	10,681.40
On Hand July 1, 1921	$ 1,290.60

Financial Statement—from July 1, 1921 to June 30, 1922.

MONTH	Salaries	Traveling Expenses
July	$ 882.46	$ 264.09
August	862.53	229.43
September	681.08	103.31
October	666.66	96.41
November	666.66	343.30
December	666.66	198.75
January	666.66	179.64
February	666.66	69.73
March	666.66	150.31
April	666.66	90.27
May	666.66	191.72
June	666.74	57.83
Total	$8,426.09	$1,974.79

Miscellaneous Expenditures.

MONTH	Stationery and Office Supplies	Postage	Printing and Miscellaneous
July	$ 5.75	$10.00	.....
August	9.85	.....	.....
September	53.14	.....	.....
October	11.90	.....	.....
November	16.66	.....	.....
December	3.35	.....	$ .42
January	.....	.....	5.01
February	.....	.....	.....
March	16.44	.....	.....
April	2.37	11.00	96.66
May	1.20	.....	5.86
June	9.54	10.00	5.60
Total	$130.20	$31.00	$113.55

On Hand July 1, 1921	$11,290.60
Total Expended	10,675.63
On Hand July 1, 1922	$ 614.97

BUREAU OF PLUMBING AND DOMESTIC SANITARY ENGINEERING

July 1, 1920, to June 30, 1922.

Frank R. King, State Plumbing and Domestic Sanitary Engineer, Madison.
John Owens, Assistant State Plumbing Inspector, Racine, Southern District.
Robert E. Hasselkus, Assistant State Plumbing Inspector, Dousman, Eastern District.
Eugene Morse, Assitant State Plumbing Inspector, Eau Claire, Northwestern District.
Mary L. Beams, Chief Clerk and Stenographer.
Mabel B. Terry, Draftsman and Assistant Clerk.
Committee of Plumber Examiners:
Frank R. King, Madison
Frank J. Smith, Milwaukee.
A. J. Matthais, Milwaukee.

The work of this bureau is of a diversified character and embraces the broad field of building sanitation, including plumbing, water-flushed and waterless toilet facilities, private water supply and sewage disposal systems, public comfort stations and camp site sanitation, and kindred subjects, all of which have been reviewed comprehensively in previous reports. (For organization and functions of the bureau see 1918 to 1920 biennial report.)

As in previous years the bureau has worked consistently during the period to improve home comforts and sanitation as it relates to modern home conveniences. Every effort has been made to effect an organization making possible prompt and efficient service with a minimum of lost motion or duplication of effort. To accomplish this, red tape of a nonessential character is avoided. The motto of the bureau is to cooperate with all working along similar lines of endeavor so as to render the greatest amount of good for all. Advice and service are rendered free to any local official or citizen of our state. (See Summary of Activities).

Codes and Publications

Since the organization of this bureau in 1913 the following codes and publications dealing with plumbing and domestic sanitary engineering matters have been prepared and conservatively distributed among the citizens, schools, libraries, etc., of our state having actual need for them. These codes are especially prepared to meet Wisconsin conditions and needs, and are educational in character. The first three named have received widespread national recognition.

1. *Wisconsin State Plumbing Code*, prescribing minimum, uniform standards which have the force of law and are applicable to any building in this state.

2. *Private Water Supply and Sewage Disposal Systems—Suggested Methods.* Reprint from State Plumbing Code, treats the subject of farm sewage disposal, or where public sewers are not available, in a comprehensive manner, with illustrations, and readily followed by the plumber or others seeking to make and operate such installation.

3. *Public Comfort Station Code and Rest Room Suggestions.* This publication contains all known essentials as they relate to convenience, location, privacy, design, construction and care in operation or maintenance of such stations.

4. *Wisconsin Rural School Privy Code*, especially prepared for school purposes and serving to raise the standards of out-door school toilets and promote better sanitation. Also see Rules and Regulations Relating to Sanitary Care of Schools, containing information relating to schoolhouse water supply and general sanitation.

5. *Wisconsin Dry and Chemical Closet Code.* This publication prescribes minimum standards and provides that such systems be approved by the State Board of Health prior to installation.

6. Bulletin, "*Water Supply and Drinking Devices—How They May Spread Bacterial Diseases*," contains information giving the important essentials in the selection, installation and operation of such appliances.

7. *Plumbers' License Directory*, giving the names and addresses of all state licensed plumbers.

8. *Blueprints, Specifications and Instructions* are furnished sufficiently detailed to permit construction and operation in accordance therewith. This service is primarily intended to make it more readily possible to carry out the bureau's recommendations or orders, but is limited to projects of insufficient size to warrant the service of an engineer or architect. It is needless to say that it is extremely popular with owners, plumbers, engineers and architects, and is rendered to all alike.

9. *Form Ordinances* dealing with matters coming under the purview of the Bureau's work have been prepared for the guidance of municipalities. Of these a large number have been adopted throughout the state, making for uniformity in sanitary regulations.

10. *Miscellaneous.* General information by correspondence or by special articles relating to installation or operation problems.

Publications Under Formulation

Tourist Camp Site Sanitation dealing with water supply, toilets, garbage disposal, general sanitation.

Summer Resort Sanitation dealing with water supply, toilet facilities, garbage disposal, bathing, lake and stream pollution and general sanitation.

Private Water Supply Systems for Rural Homes and Schools, embracing source, safety and adequacy of the water supply and type of system best suited for each case. It is contemplated to have these publications for distribution in 1923.

Amendments to Plumbing Code

The State Plumbing Code was amended by vote of the state board on July 15, 1921. The new code was distributed in the summer of 1922. The following amendments are made:

1. Some provisions are rearranged and sketches placed in contiguity to the text to which they relate.
2. Additional definitions and terms are supplied.
3. Section 4 is amended to allow provision for "size and grades of drains" from street main to building, applying to places where no local ordinance is in force.
4. Chart A is amended to permit a larger number of closets on soil pipe stacks.
5. Section 5 is amended to prohibit laying of galvanized iron or steel drainage, waste or vent piping underground, and for its protection where it passes through or is laid in concrete.
6. Section 22 on cleanouts is amended to require the installation of cleanouts where the main house drain enters the building and the placing of cleanouts at the bottom of stacks at points where stoppages may occur.
7. Section 28 is amended to require that rainwater leaders rising within the building when connecting with a storm sewer shall be treated the same as those entering the combination system, except that the pipe used in construction may be cast iron, galvanized, asphaltum-coated or black iron pipe.

All other amendments are minor, tending to clarify the code.

Changes in Public Toilet Requirements

By action of the State Board of Health and the Industrial Commission, the joint orders relating to existing and new public toilet rooms were amended in 1921. The principal changes are summarized as follows:

Section (Order) 5259 of the Plumbing Code relative to partitions between fixtures is amended to make the height of compartment partitions 5½ to 6 feet above the floor, with the bottom left from 6 to 12 inches above the floor. The compartment shall not be less than 30 inches in width and shall be sufficiently deep to permit the door to swing past the fixtures when open.

Section (Order) 5260 now requires that on all new installations in schools, theaters, hotels, office buildings, mercantile buildings, libraries, museums or similar buildings, only individual urinals shall be used, to be of porcelain or vitreous china set into the floor and the floor graded toward the urinal, equipped with automatic tank or valve

or a foot-operating flushing device. This order is effective on all new urinal installations on July 1, 1922.

Section (Order) 5232 relative to theaters and assembly halls is amended to require a larger ratio of closets and other fixtures on new installations. Existing installations may remain as before. This amendment seeks to extend personal hygiene, eliminate objectionable odors usually prevailing in public toilet rooms, and improve the general appearance of such rooms without materially increasing initial installation cost.

Sections 56, 57 and 58 of the State Plumbing Code relating to private water supply and sewage disposal systems were amended, rewritten, and the provisions illustrated to make their installation more readily understood by engineers, plumbers, architects, designers of plumbing installations, and owners. In addition to the essential requirements having the effect of law, various suggested methods are fully discussed and illustrated looking to the protection of private water supply and preventing of lake and stream pollution.

Need for Washing Facilities

The use of wash basins or washing facilities in connection with public toilet rooms is growing as municipalities and schools are giving increased attention to these needs. Such provision is a recognized need for well ordered living and helps to check the spread of disease. The hands are a prolific source of germ dissemination when conditions are favorable for such activity, and washing facilities give constant incentive to personal cleanliness. This has been constantly advanced in all efforts to promote comfort stations and in providing for toilet accommodations of the water-flushed type in public, semi-public and industrial establishments.

Bubblers and Drinking Devices

A survey of bubbling fountains in service disclosed that a large number are of questionable design. Many are not safer than the ordinary common drinking cup. This bureau issued bulletins on safe and unsafe types of drinking devices of the bubbler type. This has served many municipalities, schools, industries, architects and plumbers as a guide in correcting defective bubblers or in the selecting of new appliances.

Local Plumbing Regulations

During this biennium a number of cities and villages adopted or amended existing plumbing and drainage regulations. The standard or form ordinance of the Bureau has been extensively used for this purpose, thus bringing about uniformity of plumbing and installation requirements based upon the provisions of the State Plumbing Code.

An extensive revision of the Milwaukee ordinance relating to plumbing and drainage took place, which new code is in nearly all respects in conformity with the state plumbing code and most likely

will be used by many of the municipalities as a guide in amending existing regulations.

Installation Rejections

The percentage of rejections of plumbing installations by the assistant state and local plumbing inspectors has constantly declined since the plumbing law has been in force. State inspectors' rejections show up as follows:

1914	36 %
1915	36 %
1916	26 %
1917	10 %
1918	12 %
1919	10.6%
1920	11.2%
1921	3.5%

The marked improvement in these conditions in the smaller municipalities and rural districts is evident from the above figures. (Also see Summary of Activities.)

School Toilet Facilities

A large number of schools, both public and private, during this period improved sanitary conditions by the installaion of modern toilet facilities which took the form of water-flushed toilets, chemical or dry closets or modern privies. Toilet facilities of a large majority of our 5,000 one-room rural school buildings, however, are such that they are deserving of more careful consideration than the problem has received in the past. This subject includes safe water supply and is fully presented in a bulletin prepared by the bureau and issued by the State Board of Health, known as the Wisconsin Rural School Privy Code. Each school clerk has been presented with this bulletin and some schools repeatedly, with the result that many of the existing privies have been improved and a large number of new ones erected. It may be observed as a general rule that the larger schools are in a better position to provide indoor toilets of the water-flushed or waterless type, and maintenance likewise is usually carried on in a more thorough manner.

State Fair Toilets Enlarged

This bureau supplied advisory service freely and prepared designs for new and improved toilets at many county fairs. Material betterment of fair toilets is now apparent in this state.

Public Water Supply and Sewerage

The personnel of the bureau during this period as in previous years cooperated with the bureau of sanitary engineering in the promotion of new public water supply and sewerage systems and with the extension of existing ones. A number of such systems were under con-

struction or contemplation at the close of this biennium. This is especially true of public sewer systems of which there are approximately 100 less than water works systems.

Rural or Private Water Supply Systems

The trend for more home comforts on farms and in small communities not served by public supplies continued without abatement. Home owners to the number of approximately 2,000 installed private water supply and sewage disposal systems during the two-year period. This movement has become so large and the demand for dependable information so continuous that this department devoted a large portion of the new State Plumbing Code to the subject of sewage disposal, and has issued a reprint on this phase of the work for all who want this special information. Detailed information is given as to types and care of the system and installation methods.

Private water supply systems are in part treated in the same manner. A more comprehensive presentation is contemplated in a special bulletin now under formulation.

These installation suggestions are interesting not only to home-owners but schools, summer resorts and industries not accessible to public systems.

Summer Resort Sanitation

The growth of Wisconsin as a summer resort state and the tourist movement has made summer resort sanitation important, and brought many problems. Undoubtedly inadequate sanitary facilities and lack of incentive to provide proper accommodations for summer visitors may have been a factor in causing typhoid in some localities. The danger is always present without precautions being observed. As one step in the movement for better conditions, this bureau assisted in the compiling of a blank questionnaire detailing the topography, soil, existing conditions affecting water supply, lake and stream pollution, sanitary facilities and possibilities, and all factors involved in a plan for sanitary improvements.

Camp Site Sanitation

The rapid multiplication of municipal camp sites for summer tourists has brought sanitary problems, chief of which is provision for safe water supply and toilet facilities and their proper care. This bureau is soon to issue regulations governing general sanitation at such places relating to water supply, toilet facilities, garbage and rubbish disposal, etc.

Service How Rendered

Advice and service are rendered free to any local official or citizen of our state.

In asking for the services of a field man for inspection or investigation, the request whenever possible should be made direct to the

State Board of Health, Bureau of Plumbing and Domestic Sanitary Engineering.

It is also essential that all such requests be accompanied by particulars as to place, how reached and the character of the work to be performed.

Whenever practicable such requests should be in as early as possible, that the bureau may assign and route its field workers economically and to better advantage.

Plumbers' Apprentices

In previous reports references were made to difficulties experienced in securing plumbing apprentices and the reasons therefor given in a general manner. It may be noted that at present there are 73 indentured plumbing apprentices as provided in Section 2377 of the Wisconsin Statutes, against some 21 reported in 1920. In addition to the indentured apprentice, upwards of 100 young men above the age of 21 years are engaged as plumbers' helpers, their aim being to learn the trade of plumbing. It is believed, however, that the total number is considerably less than the actual need of the industry demands. Efforts are therefore being made by both master and journeyman plumbers and the state departments interested to increase this number and to assist these apprentices and helpers in mastering the fundamentals of plumbing so as to make for skilled artisans. It is to be observed that the examination of plumbers discloses that the boy who has been indentured under the state law and who has been subject to the rules and regulations governing such apprentices gives a much better account of himself in examination for a journeyman plumber's license than the boy or young man who works as a plumber's helper and has not the advantage afforded the indentured apprentice.

It is especially true in cases where the boy has had the opportunity to attend a vocational school for the period prescribed. Shop conditions and environment of course are factors, but all in all the indentured boy is more competent and better trained. He undoubtedly excels because he appears to have a more definite understanding of plumbing fundamentals in connection with the tools of the trade, design and materials used, and in all plumbing and drainage work. It is generally agreed that the indenturing of apprentices as carried on under the state law is a success and a distinct aid to the plumbing trade.

Proper cooperation and help on the part of master and journeyman plumbers will be of great benefit to those engaged in the industry and the general public.

From observations we might conclude, however, that there is an important factor lacking, that is a proper textbook to assist the apprentice, master and journeyman and the vocational school instructor to coordinate in a practical way all the phases of modern plumbing. It may be said that this is the missing link in the training of apprentices, and that when such a book has been provided we may look

forward to the production of more efficient apprentices and journeyman plumbers.

Committee of Plumbing Examiners

The examining committee now consists of Frank R. King, State Board of Health representative and chairman of the committee, A. J. Matthais, Milwaukee, the journeyman plumbers' representative, and Frank J. Smith, Milwaukee, secretary of the committee, a master plumber.

A Summary of Licensing Activities by This Committee Follows: Examining and Licensing of Plumbers

Number of examinations held, July 1, 1920, to June 30, 1922	8
Number of cities where examinations were held	16
Number of masters licensed	145
Number of journeymen licensed	130
Total master plumbers' licenses issued up to June 30, 1922	1165
Total journeyman plumbers' licenses issued up to June 30, 1922	1785
Number of masters' licenses exchanged for journeymen's licenses biennium	7
Number of masters failing in examination, biennium	32
Number of journeymen failing in examination, biennium	90
Number of journeyman plumbers' licenses in force June 30, 1922	1174
Number of journeyman plumbers' licenses which have not been renewed for various reasons	611
Number of master plumbers' licenses in force, June 30, 1922	904
Number of master plumbers' licenses which have not been renewed for various reasons	261

Fees for Plumbers

Journeyman plumber's initial fee, $2; renewal fee, $1; revival fee, $1.
Master plumber's initial fee, $25; renewal fee, $15; revival fee, $5.
Licenses must be renewed during the month of January of each year.

Summary of Activities

Wisconsin State Board of Health—Bureau of Plumbing and Dom. San. Engr. Biennium July 1, 1920, to June 30, 1922

1.	Number of places visited	463
2.	Total visits to above places	2150
3.	Number of places not visited having public sewer or water systems	41
4.	Places visited having neither waterworks nor sewerage systems	266
5.	Number of plumbing shops	925
6.	Places where law requires state license	79
7.	Places having local inspection	58
8.	Places having adopted local ordinances	67
9.	Local ordinances pending	17
10.	Places having public water systems, not including "fire protection only"	269
11.	Places having public sewer system	194
12.	Public sewer or water system under construction	8
13.	Public sewer or water system contemplated	17

14. Approximate number of private sewage disposal installations in places visited 6000
15. Plumbing, water supply and drainage inspections made 2062
16. Installations approved 6550
17. Installations rejected 589
18. Percentage of rejections 9.7%
19. Principal reasons for rejections:
    - Design 213
    - Material 178
    - Workmanship 154
20. Orders issued 409
21. Orders complied with 332
22. Orders pending 69
23. License violations reported or adjusted 122
24. Number of prosecutions by the state and local departments .. 13
25. Visits to plumbing shops 2365
26. Number of owners or plumbers assisted with plumbing problems 1940
27. School toilet accommodations, water supply and waste disposal installations assisted with 236
28. Number of residential sewage disposal systems designed 343
29. Industrial plant toilets, water supply, sewage disposal, assisted with 106
30. Character of plumbing installations in places visited, with municipalities as the unit:
    - Good 180
    - Fair 240
    - Poor 43
31. Improvements noted in places visited Yes-320 No-100
32. General sanitary conditions relating to waste disposal in places visited:
    - Good 200
    - Fair 200
    - Poor 63
33. Educational articles prepared for publication relating to sanitary plumbing, water supply, drainage, etc 40
34. Office correspondence on licensing of plumbers, supervision of plumbing, sewage disposal and related subjects 5000
35. Investigations made or aid given renew sewerage or water systems or extensions of existing systems 60

FINANCIAL STATEMENT OF STATE LICENSING OF PLUMBERS

July 1, 1920 to June 30, 1921

MONTH	Salaries	Official Expense	Per Diem	Miscel-laneous
July	$ 1,158.33	$ 318.63	.....	.....
August	1,205.83	450.49	$105.00	.....
September	1,158.33	363.31	.....	.....
October	1,200.33	289.88	.....	.....
November	1,158.33	357.05	55.00	.....
December	1,165.83	258.40	40.00	.....
January	1,154.08	303.23	50.00	$ 4.35
February	1,248.33	354.57	50.00	.....
March	1,248.33	325.71	40.00	.....
April	1,248.33	376.17	.....	.....
May	1,248.33	398.50	100.00	.....
June	1,248.37	262.54	.....	9.66
Total	$14,442.75	$4,058.48	$440.00	$14.01

Statements Furnished by Superintendent of Public Property and Printing Board

MONTH	Stationery and Supplies	Postage	Telephone and Telegram	Printing and Paper	Miscel-laneous
July	$ 5.43	.....	$11.10	$ 36.40	$ 2.73
August	13.09	.....	11.20	14.83	15.43
September	.....	$ 30.00	9.10	9.74	13.36
October	6.36	20.00	1.80	90.07	7.24
November	8.72	40.00	.....	21.59	9.90
December	.89	59.00	.....	12.71	7.33
January	5.00	20.00	1.80	44.16	6.04
February	6.94	5.00	.....	.....	4.31
March	11.80	34.00	.....	1.60	724.47[a]
April	9.28	.....	.....	.....	21.31
May	9.72	23.00	.....	2.71	5.71
June	.90	.....	.....	.80	22.93
Total	$78.13	$231.00	$35.00	$234.61	$840.76

Balance Cash on Hand June 30, 1920	$21,645.89
Total Cash Received in Fees from July 1, 1920	15,734.25
	$37,380.14
Total Disbursements	20,374.74
Cash on Hand July 1, 1921	$17,005.40

FINANCIAL STATEMENT OF STATE LICENSING OF PLUMBERS

July 1, 1921, to July 1, 1922

MONTH	Salaries	Official Expense	Per Diem	Miscellaneous
July	$ 1,233.33	$ 378.21	.....	.....
August	1,316.66	384.44	$183.50	.....
September	1,233.33	313.77	.....	$2.59
October	1,233.33	389.34	.....	.....
November	1,233.33	282.50	157.58	.....
December	1,233.33	212.11	.....	.....
January	1,258.33	281.65	.....	.....
February	865.83	298.49	.....	.....
March	770.83	144.96	.....	.....
April	770.83	178.88	.....	.....
May	895.83	348.31	.....	.....
June	1,058.37	186.58	.....	.....
Total	$13,103.33	$3,399.24	$341.08	$2.59

Statements Furnished by Superintendent of Public Property and Printing Board

MONTH	Stationery and Supplies	Postage	Telephone and Telegram	Printing and Paper	Miscellaneous
July	$ .75	.....	.....	$ 45.60	$ 40.95
August	30.67	$ 46.00	.....	22.37	3.22
September	11.71	.....	.....	.....	64.27
October	6.43	.....	.....	3.21	28.58
November	.48	89.00	.....	80.98	2.18
December	3.17	.....	$9.00	12.15	17.97
January	6.83	40.00	.....	9.20	13.72
February	1.85	.....	.....	.80	8.00
March	13.59	.....	.....	22.50	19.03
April	7.45	.....	.....	.....	32.82
May	5.14	35.00	.....	.80	25.44
June	1.59	.....	.....	168.32	6.41
Total	$89.66	$210.00	$9.00	$365.93	$262.59

Balance Cash on Hand July 1, 1921	$17,005.40
Total Cash Received in Fees from July 1, 1921	15,741.85
Total Cash	$32,747.25
Total Disbursements	17,783.42
Cash on Hand July 1, 1922	$14,963.83

PUBLIC COMFORT STATION AND REST ROOM REPORT

(Section 43.49, Statutes)

During this biennium the personnel of the Bureau of Plumbing and Domestic Sanitary Engineering was assigned to devote one-half of their time during the months of February, March and April and one-fifth of their time thereafter to public comfort station work, compensation and traveling expenses to be pro rated equally between the comfort station fund and the Bureau's plumbing license fee fund. For comfort station supervision activities the sum of $5,000 was granted by the 1921 legislature. On this working basis the law has been administered since January 1, 1922.

A consistent advance in the public comfort station movement marked the period as communities learned more of its advantages for them and their visitors. The mandatory clause in the law (which brings all incorporated cities and villages under its provisions) is in itself an educational force of no mean importance. The act is today accepted with little or no opposition from any quarter. Field men of this Bureau have made the supervision of comfort station work a major duty. Where indifference to the law is shown, the field men have endeavored to stimulate interest leading to action. In most cases failure to comply readily with the law has been due to financial burdens of the municipality which made necessary a postponement of the comfort station program.

Progress Report

The following chart shows the progress that has been made and also indicates the manner in which the comfort station conveniences are provided in existing buildings, separate buildings and other sites.

CHART

Key
A—Independent Bldg.
B—City Hall
C—Store Bldg.
D—Courthouse
E—Library
F—Community Hall

Key
G—Auditorium
H—Bank Bldg.
I—Bridge Abutment
J—Miscellaneous Sites
K—Parks

Place	A	B	C	D	E	F	G	H	I	J	K
Albany		*	*								
Altoona							*				
Appleton											*
Ashland		*									
Baldwin					*						
Baraboo		*									
Beaver Dam											*
Beloit			*								
Benton		*									

Place	A	B	C	D	E	F	G	H	I	J	K
Black River Falls					*						
Berlin								*			
Brooklyn	*										
Biron						*					
Chippewa Falls	*										
Colfax					*						
Columbus		*									
Coon Valley	*										
Delavan			*								
Durand										*	
Eau Claire	*										
Edgerton			*								
Fennimore	*										
Fort Atkinson		*									
Fond du Lac						*					
Fountain City						*					
Galesville					*						
Green Bay									*		
Hayward			*							*	
Hillsboro	*										
Hudson					*						
Kaukauna						*					
Kendall										*	
Kilbourn										*	
Ladysmith								*			
Lake Geneva	**										
Lake Mills		*									
Lancaster				*							
Lodi		*									
Loyal			*								
Madison		*									*
Marinette											*
Markesan		*									
Marshfield										*	
Mauston		*									
Menomonie	*										
Milwaukee	*	*							*		*
Mineral Point		*									
Montello						*					
Monroe				*							
Mukwonago		*									
Neillsville										*	
New Richmond					*						
Oshkosh									*		*
Plainfield		*									*
Port Edwards							*				
Prairie du Chien					*						
Racine		*							*		
Redgranite			*								
Rhinelander	*										
Rice Lake											*
Richland Center		*									
River Falls					*						
Rothschild							*				
Sheboygan									*		*
Sparta										*	
St. Croix Falls								*			
Stevens Point										*	
Stoughton			*								
Sturgeon Bay											*
Sun Prairie		*									
Tomah										*	
Viroqua					*						
Washburn		*									
Wauwatosa	*										
Wautoma			*								
Whitehall					*						
Whitewater		*									
West Allis		*									

Scope of the Law

In all, 463 municipalities come under the mandatory features of this law. It is evident that continued education on the subject and a certain amount of latitude looking to future installation, when costs can be borne with less difficulty, are still urgently necessary. It is an excellent token, however, that there is now little or no inclination on the part of local authorities to evade the issue.

Comfort Station Law Extended

The legislature of 1921 amended the law as adopted by sub-section 4 to extend its scope so that the state, every county, city, village and town maintaining places of public assemblage or camp sites may also provide and maintain a sufficient number of suitable and adequate public comfort stations for both sexes and may establish rest rooms separate or in connection with such comfort stations. All such stations must conform with the minimum requirements set forth in the public comfort station code.

Public Comfort Station Code

The rules and regulations governing the location, construction, equipment and maintenance of public comfort stations called for in section two of the act were issued in 1920 and placed in the hands of all municipal officials coming under the provisions of the act, and codes also furnished to civic organizations and others interested.

One of the most assuring signs in this movement is the provision made by many cities for comfort station and rest room funds in their 1923 budgets. This foreshadows marked increase in these facilities. It is believed further activity will be shown in establishing these conveniences at tourist camping grounds, fair grounds, baseball parks and public parks generally. Greater advertising of the standard comfort station signs and finders is apparently much needed where these stations already are operating. The department has continued to furnish comfort station guide signs and finders at cost to municipalities and other units.

PUBLIC COMFORT STATION ACT

(Sec. 937f of the Statutes)

***Financial Statement for Six Months, January 1 to June 30, 1922**

MONTH	Salaries	Traveling Expense	Stationery Supplies	Postage
January	.....	.....	.....	.....
February	$578.85	$ 96.96	.....	.....
March	587.50	156.79	$10.91	$19.00
April	567.15	185.70	.....	.....
May	487.50	157.68	.....	.....
June	200.00	99.62	.....	.....
Total	$2421.00	$696.75	$10.91	$19.00

MONTH	Printing	Miscellaneous
January	.....	.....
February	.....	$ 92.62
March	$31.84	.....
April	26.05	.....
May	25.39	55.93
June	.....	.....
Total	$86.28	$148.55

Balance on Hand January 1, 1922	$5,000.00
Total Expenditures	3,382.49
Balance on Hand July 1, 1922	$1,617.51

*The appropriation of $5,000 for public comfort station supervision became available on July 1, 1921. Organization to carry on these activities was authorized by the State Board of Health in January, 1922. None of these funds were used, however, until February following, so that the expenditures listed cover only a half-year period.

BUREAU OF CHILD WELFARE AND PUBLIC HEALTH NURSING

The outline of proposed activities given in the last biennial report has been followed and gratifying progress made. Contact has been made with the groups that were active in the Children's Year weighing and measuring campaign and assistance given them in establishing permanent organizations in one form and another. About 45 health centers with varying functions, but all doing some child health work have been established. There has been one meeting of the advisory Public Health Committee at which the program under the Sheppard-Towner Act was discussed and approved, with the following organization represented: Wisconsin Federation of Women's Clubs; Women's Christian Temperance Union; Wisconsin Nurses' Association; State Conference of Social Workers; Wisconsin Medical Association; Industrial Commission; United States Public Health Service; American Red Cross, Central Division; Department of Public Instruction; Wisconsin Anti-Tuberculosis Association; University of Wisconsin; State Board of Control; National Organization for Public Health Nursing; Federal Children's Bureau; Wisconsin League of Women Voters and Wisconsin State Board of Health.

No portion of the Federal fund for the promotion of the welfare of maternity and infant hygiene was received during this biennium.

The program included:

Child health conferences, in a traveling health center called the Child Welfare Special and in various cities irregularly from one to three days each. Regular prenatal and child health conferences at county child health centers. Monthly prenatal letters sent to expectant mothers whose names are submitted by their physicians or by public health workers.

Advisory service to 185 public health nurses doing school, industrial, community and county work.

District conferences of public health nurses.

Letter offering certain services and leaflet on Breast Feeding, sent out with birth cards.

Distribution of printed material.

Promotion of Little Mothers classes.

Establishment of classes for mothers' helpers and midwives.

Staff

Director for entire biennium
1 Pediatrist from Jan. 1, 1922
1 Maternity Center Physician from Aug. 15, 1922
2 Advisory Nurses
4 Maternity Center Nurses from Sept. 1, 1922
1 Child Welfare Special Nurse
1 Child Welfare Special Driver
2 Stenographers
2 Clerks

Child Welfare Special

A traveling Child Health Center was built on a truck chassis. It began operation on April 17, 1922 and filled the following schedule up to November 24, 1922:

Rock, 3 weeks	Oneida, 1 week	Juneau, 2 weeks
Grant, 3 weeks	Bayfield, 3 weeks	Jefferson, 2 weeks
Sheboygan, 3 weeks	Portage, 2 weeks	Waukesha, 1 week
Manitowoc, 2 days	Monroe, 3 weeks	Dane, 3 weeks.
Oconto, 3 weeks		

Four thousand two hundred fifty-nine children were examined, of whom 1,959 were infants and 2,300 children of pre-school age. Seventy-two prenatal cases were given advice. The examination results were qualified as follows: Children with no defects, 636; Number breast-fed, 2,778; Normal weight, 2,989; Underweight, 972; Overweight, 298; Defective teeth, 1,511; Diseased or enlarged tonsils, 1,512; Adenoids, 359; Defects of eyes and vision, 178; Discharging ears, 46; Enlarged glands, 886; Skin eruptions, 240; Defects of bones and muscles, 252; Phimosis and adhesions, 850; Defective lungs, 318; Organic heart disease, 177; Defects of nervous system, 41; Subnormal mentality, 46.

These figures cannot show the actual value of the work done, the interest and gratefulness of mothers and fathers, the crippled children found who would never have received treatment, the babies suffering from malnutrition, the astonishment of mothers when told that proper every day care would in many cases prevent the need of circumcision, the appreciation of county physicians who brought difficult cases for diagnosis, and the many human interest incidents reported by the staff.

In every county visited local physicians were invited to observe the work being done. Forty-nine physicians visited the Special during the season and many favorable comments made on the work. Rural mothers have gladly accepted this service and the following comment from one of them is typical of many comments heard.

"It brought to the mothers' attention the fact that a child may *seem* in perfect health, and yet be in need of a change in diet or in need of medical attention. I believe that mothers will watch their children more closely, and be more apt to seek medical advice if a child does not seem normal. Personally I have used more vegetables in the diet to increase minerals in a child whose bones showed lack of same."

It is planned to visit each of the 71 counties during the period of five years. Following that it is hoped to place the Child Welfare Special in one county for an intensive demonstration of one year.

During the winter months the Child Welfare Special physician held Child Health Conferences in 26 places with results similar to those quoted above.

Maternity and Infant Health Centers

Purposes. To promote and maintain the health of child-bearing women and children of pre-school age by giving:

Complete physical examination.

Instructions to expectant mothers on care of themselves.

Advice to mothers on care of their babies and pre-school children.

Instruction to girls of Wisconsin on care of babies.

338 mothers died in 1920, due to childbirth.

4665 infants under one year died in 1920.

Results. Tangible results to be expected five years from now in counties where centers are located.

Infant morality lowered one-half.

Maternal mortality lowered one-half.

Improved health of children upon entering school.

Increase hospital facilities for maternity cases.

Location. It is planned to establish centers in about forty counties beginning with those most ready, centers to be located in the places where the largest number of rural mothers and children will be reached, and to be moved from year to year to different parts of county in order to render service to all.

Finance. Local voluntary organizations provide the rooms, equipment and maintenance.

The state and federal funds will provide a physician for one day every four weeks and a nurse for one week a month.

Work to be done at the Centers. Complete physical examination of expectant mothers including pelvic measurements, urinalysis, and blood pressure. All prenatal cases urged to select physician early and see him regularly.

Record of each case sent to her physician.

Advice on general hygiene and care given.

All well infants and pre-school children given complete examination and received month after month to assist mothers in keeping them well.

Children needing medical care referred to family physician.

Destitute cases referred to proper agencies and every effort made to see that necessary care is supplied.

Centers were in operation on Jan. 1, 1923, in the following counties: Clark, Dane, Grant, Green, Jackson, Marathon, Marinette, Oneida, Rock, Vilas, Walworth and Wood. Next ones to be opened: Jefferson, Racine, Forest and Waukesha.

The following counties are ready and waiting for service:

Chippewa, Eau Claire, Fond du Lac, Outagamie, Manitowoc, Marquette, Monroe, Barron, Sheboygan, Taylor, Polk, La Crosse and Waupaca.

Monthly Prenatal Letters

These have been carefully compiled by the Bureau Physicians and are similar to those used in many other States. The letters were first issued in July, 1922, and up to January 1, 1923, 515 expectant mothers have been reached.

Advisory Service to Public Health Nurses

During all or a part of this biennium 56 counties have employed one or more public health nurses under the mandatory county nurse law passed by the 1919 legislature. The 1921 legislature placed all public health nurses, outside of the city of Milwaukee, under the same general provisions of the law applying to county nurses. There has been an average of 129 other than county nurses in service during this period.

Record and report forms have been slightly revised and additions made to them.

From July, 1921, to November, 1921, one Field Advisory Nurse was employed; from that time to May 1, 1922, there were two nurses on the staff. The following statistical report will show the field work of these two nurses and the director. One hundred one county nurses visited; 197 other public health nurses visited; district conferences of public health nurses have been held in Fond du Lac, Neenah, Wausau, Rhinelander, Ashland, La Crosse, Chippewa Falls and Racine, and two annual conferences or institutes in Madison.

Monthly reports have been received and special advice given in many instances by letter.

Since March, 1922, monthly mimeographed bulletins dealing with child welfare and public health nursing subjects have been issued.

Letter with Birth Card

To the mother of each child, whose birth is properly recorded, is sent a letter of congratulation, enclosing a leaflet on breast feeding and one on care of the baby and offering more detailed pamphlets and feeding charts if desired. Attached to it is a form on which the mother is urged to report for prenatal letters when she again becomes pregnant. Twenty-two thousand six hundred letters and 45,200 leaflets have been sent out and many replies received asking for specific advice as well as for publications.

Publications

The use of the publications of the Federal Children's Bureau and other organizations has been continued. One hundred thirty-eight thousand six hundred forty-three pamphlets were distributed; reprints have been made of five of the Federal Children's Bureau Dodgers on Care of the Baby, Milk, What do Growing Children Need, Care of the Mother, and Breast Feeding. Five thousand Federal Children's Bureau pamphlets on Infant Care have been purchased, gray covers applied, and these are used for textbooks in Little Mothers Classes.

Little Mothers Classes

The ten lesson course on Infant Care issued in 1921 has been made a permanent part of the curricula of the 48 vocational schools in the State. Classes are gradually being established by public health nurses and home economics teachers in public schools. The child welfare division of the League of Women Voters in one city has as-

sumed the responsibility of introducing the Infant Care Course into every girls' organization. Four nurses now in charge of the sixteen maternity and infant health centers are promoting these classes. On July 1, 1922, we began issuing certificates to girls who had completed at least ten lessons on Infant Care and since then 462 certificates have been issued.

Summary of Field and Office Work

July 1, 1921, to July 1, 1922

Number of circular letters issued	18,339
Number of individual letters written	6,874
Number of publications issued	138,643
Interviews held	3,138
Committee meetings	39
Number conferences attended	24
Other meetings attended	65
Number of times films shown	39
Poster sets loaned	139
Talks	294
Number present	8,671
Nurses visited	279
Number health instructors visited	2
Institutions and Hospitals visited	64
Counties visited	105
Cities visited	183
Health Centers visited	34
Schools visited	161
Number of homes visited with public health nurses	188
Demonstrations of Doll and Front Closing Layette	12
Layette loaned	2
Slides loaned (sets of 50)	36
Examinations of public health nursing candidates held	672
District nurses meetings held	11
Number pre-school children examined, January 1, 1922 to July 1, 1922	1,039
Number infants examined	889
Number child health conferences held	47
Number adults examined	467

STATEMENTS FURNISHED FOR THE FOLLOWING BY THE SUPERINTENDENT OF PUBLIC PROPERTY

July 1, 1921, to July 1, 1922

MONTH	Stat onery and Office Supplies	Postage	Printing and Paper	Miscellaneous	Salaries	Traveling Expenses
July	$ 1.13	$ 10.00	.....	$ 3.42	$ 487.18	.....
August	6.57	.....	$ 32.97	26.75	424.86	.....
September	3.44	16.03	35.14	.....	580.00	$ 172.59
October	8.76	36.00	.....	7.35	473.33	144.82
November	20.00	70.62	.....	13.47	671.24	108.04
December	15.34	.....	20.18	87.87	685.95	347.91
January	16.25	28.06	106.69	10.66	826.47	267.04
February	68.25	74.18	23.63	730.47	969.99	259.50
March	29.67	20.06	184.27	88.92	1,006.99	261.51
April	19.69	69.71	.....	1,225.42	1,094.99	273.91
May	29.95	20.00	24.74	6,434.46	1,124.37	652.44
June	44.34	59.12	64.74	838.91	1,143.30	116.23
Total	$263.39	$403.78	$492.36	$9,467.70	$9,488.67	$2,603.99

Balance on Hand July 1, 1921	$31,100.00
Total Disbursements (above itemized)	22,719.89
Balance on Hand, July 1, 1922	$ 8,380.11

BUREAU OF NURSING EDUCATION

ADDA ELDREDGE, *Director*

(November 1, 1922)

History

The first law for the registration of nurses, and which placed the administration under the State Board of Health was passed in 1911. This was a permissive law. During 1915 there were changes, but the year ended with the 1911 law on the Statute Books, the administration being changed to the State Board of Medical Examiners. From 1915 to 1921 this law was in force.

In June, 1921, the present law was passed making registration compulsory, i. e., making the registration equivalent to a license to practice. The Bureau of Nursing Education was established and placed under the State Board of Health. This Bureau functions through a Committee on Nursing Education with the Director of the bureau as executive secretary.

Compulsory Registration

All nurses practicing as *graduate, trained, certified,* or *registered* nurses must hold a certificate from the State Board of Health. This does not mean that practical nurses, or others, may not nurse for hire or without charge but that they shall not call themselves trained, graduate, certified or registered nurses.

Reregistration

Nurses in active practice of their profession in Wisconsin must reregister annually during the month of January. The statutory fee for reregistration is $2.00. The nurses of the Wisconsin State Nurses Association decided on this fee to support the work of the Bureau of Nursing Education.

Committee on Nursing Education

The Committee on Nursing Education is composed as follows: the Secretary of the State Board of Health, the Director of the bureau of Nursing Education, two representatives from the Wisconsin State Nurses Association, one from the Wisconsin state hospital association, one from the Wisconsin conference of the Catholic hospital association, one from the State Medical Society, and one from the Public Health Nursing Bureau of the State Board of Health.

The duties of the Committee on Nursing Education, as outlined in the law, are as follows:

1. To supervise and to maintain standards for all schools for nurses.
2. To provide for and require the examination and registration of nurses.
3. To make a study of nursing education and generally to initiate rules, regulations and policies which will tend to improve nursing education.
4. To make rules and regulations for the administration of sections 38.20 to 38.30 of the statutes not inconsistent therewith.
5. To place schools of nursing on the accredited list on application of such schools and a showing that such schools are entitled to be so placed under the rules of the Committee on Nursing Education.

The work of the Committee in the administration of the law comes, naturally, under two headings: (First) Registration or licensing, annual reregistration, and state board examinations. (Second) The accrediting of schools for nurses, which includes the making of rules and regulations as to what requirements shall be made for the schools desiring to be placed on the accredited list, and rules and regulations governing their inspection and supervision.

The first year's work has, of course, dealt largely with the registration. One thousand three hundred eighty-three certificates have been issued since this law went into effect; 971 under the waiver, and 177 by examination. Two hundred thirty-five certificates have been issued without examination through acceptance of the examination of other states in lieu of Wisconsin's examination where the law of such states was equivalent to the requirements of the law of Wisconsin. The total number of Wisconsin certificates issued under this and previous laws is 3,838 (Nov. 1st, inclusive). Of these, 2,384 have reregistered since January, 1921, and are eligible for practice in Wisconsin. The inactive list, or nurses married and not practicing (not practicing either through illness, retirement or practicing in other states) is 937; delinquents, or nurses we have not been able to locate number 348. An effort is being made to find such of these nurses as are practicing in this state without complying with the law and to prosecute them for illegal practice. This, however, will be a last resort.

Certificates do not lapse for nurses not practicing in Wisconsin or practicing in other states. However, before resuming practice in Wisconsin application for reregistration must be made and a card issued for the current year.

STATE BOARD EXAMINATIONS

(State Board of Nurse Examiners)

A Board of Nurse Examiners was appointed, composed of five registered nurses, including the Director of the Bureau of Nursing Education who acts as secretary to the Board. This Board functions under the Committee on Nursing Education.

Preliminary educational requirement necessary for admittance to the state board examination, established by the law, is one year of high school or its equivalent.

Two examinations have been held; one in January (24th and 25th) in Milwaukee, and the other in June (14th, 15th and 16th). The June examinations were held, simultaneously, in Milwaukee and Eau Claire. Seventy-six nurses took the January examination of which 68 passed and 8 failed. One hundred and seventy-one took the June examination (18 of these writing at Eau Claire) of which 159 passed and 12 failed. Those who failed are on permit until after the January, 1923, examination, or were among those who had already been registered under the waiver.

Permits are issued to those nurses who complete their courses or come into the state between examinations, until such a time as they can qualify. One hundred and twelve permits have been issued since June 20th. Seventy-three are under permit until the January, 1923, examination.

Accredited Schools

The law states that a school giving a two year course for nurses may be accredited, and sets the minimum requirements for registration as follows: one year of high school or its equivalent, graduation from an accredited school, and 20 years of age. The Committee on Nursing Education has decided on an entrance requirement for accredited schools of 18 years for applicants who have the minimum requirement of one year of high school or its definite equivalent, and 17 years for students who hold a high school diploma.

There were 43 accredited schools in Wisconsin when the present director took charge. One of these has closed its school, two have been taken from the accredited list, one new school has been accredited. Three schools have been approved for affiliation. One school applying for accrediting was refused by the committee, but not before the hospital had withdrawn its request for accrediting.

No requests have been received from any of the schools for the establishment of a two-year course.

A minimum curriculum for the accredited schools has been compiled (mineographed) and distributed to the schools.

A bulletin of information relative to registration and giving the requirements, rules and regulations for accredited schools and the curriculum is now being printed.

Additional Information

A list of nurses eligible to practice in Wisconsin, i. e., registered and reregistered has been compiled and sent to 2,084 nurses and 2,099 doctors in Wisconsin. The list included only those who registered and reregistered before date of issuance of the list, May 8th, 1922. A mimeographed list of those reregistered since May 8th and up to November 1st, 1922, was sent out in November, and contained 289 names.

A comparative digest of the laws of the states requiring registration for nurses and attendants was compiled by Mrs. Lucile McCarthy of the Legislative Library, and issued by the Bureau of Nursing Educa-

tion. This digest is considered one of the most valuable contributions to nursing literature.

An effort has been made to care for those women in the state who were graduated from unaccredited schools and are ineligible for registration, under the law. Seven have already stated their desire to qualify for registration.

A course leading to the degree of Bachelor of Science and the diploma of nursing is being arranged between Ripon College and the nurses training schools of St. Agnes Hospital, Fond du Lac, and Columbia Hospital, Milwaukee. This course of three years in the college and two years in the school of nursing has been approved by the Committee on Nursing Education.

Future Plans for the Bureau of Nursing Education

1. Completion of the survey, and tabulation of the results.
2. An effort to standardize the schools for nurses and have all of them meet the minimum requirements.
3. The establishing of a reasonable equivalent for the required one year of high school through arranging for special examinations to be held.
4. The keeping of the schools in touch with what is new and good in the nursing field.
5. Arranging for affiliation in such fields as cannot be given in the home school.
6. Presenting the subject of nursing education to high school and college students. Four talks have already been given.
7. The endeavor to trace all blanks sent out but not returned to enable the determination of how many, if any, nurses are not complying with the law; and to enforce the law, as is herein stated.

It has been deemed wise that the director shall use such opportunities for placing the subject of nursing standards before groups of nurses and lay people as the occasion arises.

BUREAU OF NURSING EDUCATION
FINANCIAL STATEMENT
From July 1, 1921 to June 30, 1922

MONTH	Salaries	Traveling Expenses	Miscellaneous	Per Diem	Superintendent Public Property	Printing and Paper
July	.....	$ 44.96	.....	.....	$ 10.03	.....
August	$ 237.31	69.89	$ 10.00	.....	124.23	.....
September	157.69	21.78	.....	.....	58.65	$ 62.68
October	384.24	108.20	.....	.....	25.90	.....
November	384.24	97.84	.....	$8.00	139.13	157.50
December	384.34	68.73	.....	.....	35.54	164.70
January	562.60	19.91	97.20	.....	.....	.....
February	494.24	254.16	225.35	.....	.....	.....
March	435.13	96.17	141.70	.....	.....	.....
April	458.33	65.99	66.50	.....	.....	.....
May	503.74	90.16	12.25	.....	.....	.....
June	429.47	263.31	100.45	.....	.....	.....
Total	$4,431.32	$1,192.10	$653.45	$8.00	$709.48	$384.88

MONTH	Stationery and Office Supplies	Postage	Printing
January	$13.94	$40.12	$29.26
February	8.94	30.09	18.65
March	10.53	50.15	20.16
April	8.74	33.09	.....
May	14.33	66.15	7.83
June	8.71	18.00	164.45
Total	$65.19	$237.60	$240.35

Balance on Hand, January 1, 1922	$ 7,948.52
Total Receipts	7,080.00
	$15,028.52
Total Expenditures	4,850.89
Balance on Hand July 1, 1922	$10,177.63

EMBALMING DEPARTMENT

For the calendar year of 1920 one general examination for the licensing of embalmers was held. At this examination 55 candidates were examined and of this number 15 failed to obtain a license. Fifteen licenses were issued on reciprocity relations with other states. For the year ending December 31, 1920, there were 1,122 embalmers holding licenses issued by the State Board of Health.

For the calendar year of 1921 no examination for the licensing of embalmers was held. For 1921, 17 licenses were issued as a result of reciprocal agreements with other states.

There were no examinations for the licensing of embalmers during the calendar year of 1921 for the reason that the new embalmers' law known as Chapter 464 of the laws of 1921 provided in subsection two that "any undertaker or funeral director who on January 1, 1921, was engaged in the undertaking business shall be licensed by the State Board of Health without examination upon the payment to the State Board of Health of the fee required by section 1409—3." It was perfectly plain to the Board that all persons who were eligible to a license by examination were entitled to a license under this waiver provision and the Attorney General held that it was the duty of the Board to issue licenses to such persons. Approximately 200 persons, including unlicensed assistants in undertaking establishments, the wives and other relatives of licensed embalmers, and a few others made application for a state license under the waiver provision of the new law. The Board required all applicants for a waiver license to fill out an application blank and to submit documentary proof that the applicant was actually engaged in the undertaking business on January 1, 1921. Sixty-six waiver licenses were issued within a few months after the enactment of the new law.

The waiver provision of this law was looked on with disfavor by many of the licensed embalmers of the state, so a friendly suit was started to determine the constitutionality of the law. On account of some unavoidable delay in getting the case before the Supreme Court the Board saw fit in February, 1922 to hold a statewide examination for the licensing of embalmers so as to give those who were entitled to a license under the old law as well as under the new law an opportunity to qualify for such license as result of examination. Many of those who were issued a waiver license appeared at the examination and were successful in obtaining a license by examination instead of under the operation of the waiver clause of the new law.

The Supreme Court held the new law to be unconstitutional on the ground mainly that it is not necessary for a funeral director or undertaker to be a licensed embalmer. The Court stated further that "embalming is not required by any law of the state. It is not

essential to public health, safety, convenience or comfort under present conditions of burials and cremations. It is not universally practiced especially in rural communities. A police regulation restricting to the extent of prohibiting an ancient, honorable and necessary calling must justify its validity on the ground that it is essential to the public health, safety, convenience, comfort or morals. This statute has no such sanction. Except in those cases where embalming is desired for a special reason, we know of nothing connected with the duties of an undertaker that calls for the work of a licensed embalmer. When such work is desired a proper person can be secured to perform it."

Immediately on receipt of the Supreme Court decision all persons who were issued waiver licenses and who had not since validated that license as result of examination were notified to return the waiver license for cancellation. Upon the receipt of such license the license fee of $5.00 was returned to the applicant. All these waiver licenses with the exception of one have been returned and canceled.

For the year ending December 31, 1921, there were 1,205 embalmers holding unexpired licenses. This total includes some of the waiver licenses which have since been canceled on account of the new law being declared unconstitutional.

FINANCIAL STATEMENT OF THE LICENSING OF EMBALMERS

From July 1, 1920 to June 30, 1921

MONTH	Salaries	Traveling Expense	Per Diem	Miscellaneous	Superintendent Public Property	Printing and Paper
July	$ 45.00					
August	45.00				$10.00	
September	45.00	$103.45	$205.00	$5.00	2.13	
October	45.00					$8.34
November	45.00				40.00	12.25
December	45.00					
January	70.00				20.00	
February	45.00					
March	45.00					
April	45.00					26.90
May	45.00	7.71				
June	45.00				11.19	91.00
Total	$565.00	$111.16	$205.00	$5.00	$83.32	$138.49

Balance on Hand July 1, 1920	$2,457.16
Cash Received for Renewals and Licenses	1,481.00
Total Cash	$3,938.16
Total Expenditures	1,107.97
Cash on Hand June 30, 1921	$2,830.19

FINANCIAL STATEMENT OF THE LICENSING OF EMBALMERS

From July 1, 1921 to June 30, 1922

MONTH	Salaries	Traveling Expenses	Per Diem	Miscellaneous	Superintendent Public Property	Printing and Paper
July	$ 45.00	$ 53.56	.....	.....	.....	.....
August	45.00	59.16	$ 90.00	.....	.....	.....
September	45.00	.....	.....	.....	.....	$ 9.91
October	45.00	.....	.....	.....	.....	.....
November	45.00	.....	.....	.....	$ 84.00	3.50
December	45.00	21.77	30.00	.....	.....	16.72
January	45.00	.....	.....	.....	.....	.....
February	235.00	93.81	.....	$ 6.83	.....	.....
March	45.00	.....	.....	1.18	12.93	60.00
April	45.00	.....	.....	.....	.....	.....
May	45.00	.....	.....	.....	.....	146.35
June	45.00	8.16	.....	4.00	42.04	.....
Total	$730.00	$236.46	$120.00	$12.01	$138.97	$236.48

Balance on Hand July 1, 1921	$2,830.19
Cash Received for Renewals and Licenses	3,016.00
Total Cash	$5,846.19
Total Expenditures	1,473.92
Cash on Hand June	$4,372.27

HOTEL AND RESTAURANT DIVISION

July 1, 1920, to June 30, 1922

Inspectors

W. G. Mase.....Madison
B. A. Honeycomb.....Madison
Fred C. Borcherdt, Jr.....Manitowoc

The activities of the Hotel and Restaurant Division during the 1920-1922 biennium have been more far-reaching than ever before, and directly and indirectly have benefited larger numbers of citizens than in any prior period of the Division's existence.

The volume of inspection activities is indicated by the following figures:

	Inspections	Orders Issued	Indus. Orders
July, 1920, to Jan., 1921	2,880	555	192
Jan., 1921, to Jan., 1922	8,124	1,042	343
Jan., 1922, to July, 1922	3,073	694	211
	14,077	2,291	746

The records show that the number of inspections was more than 1,000 in excess of the previous biennium, while the number of written orders issued, both regular and industrial, totalled 322 more than in the prior period.

Supervision of sanitation of hotels and restaurants is always the major work of this branch of the health department, but the auxiliary fields of work, although not consuming so much time, are of prime importance in the extent to which they contribute to sanitation of places patronized by the public when away from home. These inspections embrace state and county fair grounds during fairs, where eating places have been supervised for general sanitation and toilet facilities given careful oversight; summer resort grounds, which are given a sanitary survey, and railroad depots and toilet facilities in connection with them, which are brought wherever possible into compliance with state sanitary standards.

A permanent appointment of a third hotel and restaurant inspector, to fill the place formerly held by E. U. F. Loether, was made in April, 1921, when Fred C. Borcherdt, Jr., of Manitowoc, a hotel operator of many years' experience, was named to work in the district covering in a general way the northern and northeastern counties. During the summer months, also, a fourth field man was employed to make inspections of summer resorts. In these surveys special attention is given to means for the sanitary disposal of sewage, to obviate bacterial dangers which hold potentialities for typhoid fever, dysentery and other water-carried diseases.

With hotel and restaurant inspection an established policy in state control of sanitation, owners have become familiar with its requirements, recognizing the true objects of the work, and with few exceptions are faithful cooperators in bettering sanitary conditions. Our policy calls for as frequent inspections as time will permit. With three men in the field it has been possible to inspect fully 90 per cent of the places one or more times per year. Hotels and restaurants of inferior class have required more than one inspection, but the constant endeavor is to bring these places up to a higher rating.

During this period the State Board adopted revised regulations governing hotels and restaurants, and adopted the rules applying to each business as a separate code. Hotel rules apply now, therefore, only to hotels, and restaurant rules only to restaurants, instead of rules for both being in effect in a combined formula.

The 1921 legislature was induced by traveling men's organizations and others to require Wisconsin hotels to post rates in each room, notice of any change in the rates to be posted at least ten days in advance. This law is now in full effect, and the field men of this division are charged with its enforcement. There has been general compliance.

The division has continued to make note of fire and accident risks in hotels under joint authority of the Industrial Commission and State Board of Health. Duplication of inspection has been avoided by this means. Even at considerable expense in some cases, hotel proprietors are required to correct any conditions that contain possibilities of fire and accident. In all cases, however, human life is placed above other considerations.

Inspections of fairs claimed some of the summer services of the field men. Nearly all county fairs, as well as the state fair, were visited for this purpose. Condition of the food supplies served at eating stands, personal hygiene of employes of stands, and attention to sanitary environment, the fly nuisance, etc., received attention, and orders were issued for changes to meet higher standards. The toilet accommodations were inspected and requirements for disinfection, sufficient capacity for large attendance, better water supply, and proper construction were brought to the attention of fair managements and provision made for reforms where needed. A number of fairs are today possessed of modern water-flushed toilets, and the trend is constantly in that direction. Fair inspection, we believe, has been fully justified and the majority of fair managements are glad to concede it.

Knowledge that they will be visited by an official of the State Health Department is a constant spur, leading lunch stand owners to observe state rules governing sanitation. On their part fair officials are prompted to have garbage service prepared for in advance, and for its regular daily collection, and to improve water supply and drainage conditions as finances will permit. We believe that continuance of this inspection service by the state is a necessity if many

insanitary conditions once existing are not to return to be a menace to the great fair-going public.

The work of summer resort supervision has brought to light many problems involving better protection of the health of resorters in this great playground state. It seems evident that more rigid requirements for the protection of health are needed, especially in the matter of better toilet facilities, safer sewage disposal and garbage disposal. It is recommended that a new set of definite rules governing summer resort sanitation be adopted before another resort season is upon us.

It is gratifying to have had the exacting clerical work of the office executed efficiently by a faithful force. One of the results of their service was economy in office expenditures, the net saving in printing and supplies in one year amounting to $656.

HOTEL AND RESTAURANT DIVISION—FINANCIAL STATEMENT FOR TWELVE MONTHS

From July 1, 1920 to June 30, 1921

Balance July 1, 1920	$17,152.29
Cash received for permits	15,215.00
	$32,367.29

MONTH	Salaries	Official Expenses
July	$ 933.14	$ 390.45
August	986.67	415.60
September	978.33	828.23
October	978.33	322.38
November	978.33	251.63
December	978.33	322.96
January	978.33	182.75
February	1,036.66	328.79
March	1,036.66	318.94
April	1,236.66	393.29
May	1,236.66	409.03
June	1,236.72	442.26
Total	$12,594.82	$4,606.31

Statements Furnished for the Following from Superintendent of Public Property

MONTH	Paper and Supplies
July	$ 52.90
August	32.80
September	4.25
October	388.10
November	171.79
December	205.61
January	213.54
February	2.23
March	818.28
April	135.57
May	.77
June	126.40
Total	$2,152.24

Grand Total Expenditures from June 30, 1920 to June 30, 1921	$19,353.37
Cash on Hand June 30, 1921	$13,013.92

HOTEL AND RESTAURANT DIVISION—FINANCIAL STATEMENT FOR TWELVE MONTHS

July 1, 1921 to June 30, 1922

Balance July 1, 1921	$13,013.92
Cash received for permits	17,073.00
	$30,086.92

MONTH	Salaries	Official Expenses
July	$ 1,241.66	$ 656.75
August	1,256.66	575.52
September	1,256.66	580.07
October	1,013.33	327.78
November	1,013.33	433.60
December	1,013.33	317.40
January	1,013.33	204.42
February	1,013.33	293.14
March	1,013.33	302.62
April	1,013.33	318.47
May	1,023.33	341.79
June	1,023.37	287.96
Total	$12,894.99	$4,459.52

Statements Furnished for the Following from Superintendent of Public Property

MONTH	Paper and Supplies
July	$ 37.46
August	19.91
September	31.73
October	155.54
November	662.38
December	182.97
January	134.15
February	30.87
March	100.55
April	10.81
May	49.70
June	79.52
Total	$1,495.59

Grand Total Expenditures from July 1, 1921 to June 30, 1922	$18,850.10
Cash on Hand July 1, 1922	$11,236.86

BARBER DIVISION

From July 1, 1920, to June 30, 1922, 4,983 barber shops were inspected in 1,496 different communities and 423 orders were issued on these shops.

During this same period 906 applicants were examined, out of which 430 failed and 476 passed.

FINANCIAL STATEMENT—LICENSING OF BARBERS

From July 1, 1920, to June 30, 1921

MONTH	Salaries	Traveling Expenses	Per Diem for Examining Board	Shop Rent
July	$ 561.66	$ 308.87	.....	.....
August	466.66	281.78	$ 88.00	$ 45.00
September	499.51	155.24	.....	.....
October	466.66	290.75	64.00	35.00
November	466.66	191.35	88.00	52.50
December	466.66	167.15	.....	.....
January	417.55	116.24	.....	.....
February	391.66	167.95	.....	.....
March	391.66	222.22	80.00	47.50
April	391.66	210.13	64.00	52.50
May	391.66	316.00	104.00	40.00
June	391.74	215.85	.....	.....
Total	$5,303.74	$2,643.53	$488.00	$272.50

MONTH	Stationery and Office Supplies	Postage	Printing and Paper	Miscellaneous
July	.....	$ 20.00	$ 8.93	$ 1.77
August	$4.70	.....	.....	.....
September	.88	.....	.....	.....
October	.....	10.00	.....	.....
November	.....	.....	.....	.....
December	.....	.....	.....	.....
January	.....	10.00	.....	.....
February	1.42	.....	.....	.....
March	.....	113.76	.....	.....
April	.....	.....	.....	.....
May	2.02	176.04	12.09	7.58
June	.....	50.00	75.92	2.40
Total	$9.02	$379.80	$96.94	$11.75

Balance on Hand July 1, 1920	$ 2,660.19
Cash Receipts from License	9,409.00
Total	$12,069.19
Total Disbursements	9,205.28
Balance on Hand, June 30, 1921	$ 2,863.91

FINANCIAL STATEMENT—LICENSING OF BARBERS

From July 1, 1921, to June 30, 1922

MONTH	Salaries	Traveling Expenses	Per Diem for Examining Board	Shop Rentfor Examination
July	$ 558.46	$ 249.68	.....	.....
August	533.32	329.35	$ 64.00	$ 54.00
September	466.66	332.77	56.00	36.00
October	466.66	302.47	80.00	38.00
November	466.66	266.63	120.00	60.00
December	466.66	198.58	.....	.....
January	424.99	156.03	.....	.....
February	424.99	138.89	.....	.....
March	424.99	183.52	72.00	50.00
April	424.99	294.92	104.00	80.00
May	504.99	333.67	112.00	40.00
June	505.11	224.42	.....	.....
Total	$5,748.58	$3,010.93	$548.00	$358.00

MONTH	Stationery and Office Supplies	Postage	Printing and Paper	Miscel-laneous
July	$ 2.98	$ 55.36	$ 59.58	.....
August	1.82	13.00	.....	$ 1.70
September	1.50	.....	.....	15.60
October	2.50	10.00	7.06	.....
November	.....	.....	.....	3.00
December	.57	19.00	4.48	.....
January	.....	.....	.....	.....
February	.....	.....	17.05	.....
March	12.30	88.64	.....	.....
April	.....	20.00	101.21	5.32
May	.....	127.36	91.60	10.94
June	6.87	62.00	6.57	2.32
Total	$29.04	$395.36	$285.55	$38.88

Balance on Hand July 1, 1921	$ 2,863.91
Receipts from Licenses	13,482.00
Total	$16,345.91
Total Disbursements	10,394.24
Balance on Hand, June 30, 1922	$ 5,951.67

BEAUTY PARLORS

During the period from July 1, 1920, to June 30, 1922, 881 beauty parlors were inspected in 221 different communities.

During this period 258 applicants were examined out of which 109 took the examination for manager's license and 149 took the examination for operator's license.

FINANCIAL STATEMENT—LICENSING OF BEAUTY PARLORS

July 1, 1921, to June 30, 1922

MONTH	Salaries	Traveling Expenses	Per Diem for Examining Board	ShopRent for Examination
July	$ 153.00	$ 287.44	$ 70.00	$100.00
August	183.33	127.93	110.00	100.00
September	58.33	.....	.....	.....
October	149.68	67.47	.....	.....
November	183.33	162.99	70.00	75.00
December	101.60	35.73	.....	.....
January	100.00	.....	.....	.....
February	100.00	81.18	100.00	75.00
March	150.93	19.92	.....	.....
April	225.00	97.67	.....	.....
May	225.00	218.30	100.00	120.00
June	225.00	112.78	.....	.....
Total	$1,855.20	$1,211.41	$450.00	$470.00

MONTH	Stationery and Office Supplies	Postage	Printing and Paper	Miscellaneous
July	$ .72	.....	$ 8.00	.....
August	2.24	.....	3.78	.....
September	2.84	$10.00	10.71	.....
October	.37	20.00	.....	.....
November	.....	.....	.....	$ 2.12
December	3.99	20.00	12.86	.....
January	.....	.....	.....	.....
February	6.30	.....	.....	15.00
March	.....	.....	.....	.....
April	9.88	.....	1.84	3.00
May	.62	10.00	11.53	2.14
June	.....	10.00	.....	.....
Total	$26.96	$70.00	$48.72	$22.26

Balance on Hand July 1, 1921	$2,533.50
Cash Received for Licenses	4,153.00
Total	$6,686.50
Total Disbursements	4,154.55
Balance on Hand June 30, 1922	$2,531.95

FINANCIAL STATEMENT—LICENSING OF BEAUTY PARLORS

From July 1, 1920, to June 30, 1921

MONTH	Salaries	Traveling Expenses	Per Diem for Examining Board	Shop Rent for Examination.
July	$ 50.00	$191.78	.....	.....
August	112.50	95.41	$ 30.00	$ 30.00
September	175.00	129.06	70.00	80.00
October	175.00	135.93	.....	.....
November	175.00	107.72	.....	.....
December	50.00	.....	.....	.....
January	39.40	65.35	80.00	80.00
February	100.00	.....	.....	.....
March	100.00	.....	.....	.....
April	225.00	67.55	.....	.....
May	225.00	113.31	.....	.....
June	225.00	.....	.....	.....
Total	$1,650.90	$906.11	$180.00	$190.00

MONTH	Stationery and Office Supplies	Postage	Printing and Paper	Miscellaneous
July	$ 1.11	$10.00	.....	$ 2.65
August	.....	.....	.....	2.18
September	.....	.....	.....	.....
October	4.93	20.00	.....	.....
November	.....	.....	$10.83	.....
December	.....	.....	12.12	2.84
January	.67	10.00	2.50	.....
February	.....	.....	.....	12.50
March	.....	.....	.....	.....
April	5.65	.....	16.12	1.54
May	4.67	.....	.....	.....
June	2.78	10.00	13.03	.....
Total	$19.81	$50.00	$54.60	$21.71

Balance on Hand July 1, 1920	$2,611.63
Cash Received for Licenses	2,995.00
Total	$5,606.63
Total Disbursements	3,073.13
Balance on Hand June 30, 1921	$2,533.50

REPORT OF THE CENTRAL STATE LABORATORY OF HYGIENE AND BRANCH LABORATORIES

July 1, 1920, to July 1, 1922

This report gives a detailed account in tabular form of all routine work done in the State Laboratory of Hygiene and Branch Laboratories for the biennium ending July 1, 1922. The tables are so arranged and headed for each laboratory that the kind, the number of each kind and the total number of specimens for each month, for each year and for the two years are displayed.

Tables III, IV and V summarize the work done in the Central Laboratory for each of the two years and for the two years. Table III, shows, that during 1920-21, the Central Laboratory received a total of 28,883 specimens, which is an increase over the previous year of 5,784 specimens. This table also shows that 3,420 doses of triple vaccine were distributed, and that 1,375 physicians used the laboratory. There are also many health officers, town, village and school board officials who are not physicians who have not been included in this figure. This laboratory is also very largely used by public health nurses throughout the state.

Table IV shows a total of 35,885 specimens received by the Central Laboratory for the year ending July 1, 1922. This is an increase over the previous year of this biennium of 7,002 specimens. This table also shows the number of doses of vaccine distributed, the number of physicians using the laboratory, and the number and kind of mailing cases distributed.

Table V summarizes the report for the Central Laboratory for the biennium ending July 1, 1922. This table shows that we received during this biennium 64,768 specimens. The report for the previous biennium shows a total of 36,981 specimens received. Thus it is seen that we have had an increase of 27,787 specimens over the amount reported in the last report.

The numbers do not represent all of the work which is going on in the Central Laboratory. During the last two years we have found it necessary to add a good deal of detail to our methods of handling the diagnosis and release of diphtheria patients. Through researches conducted in our laboratory we were convinced that in many cases a simple microscopic identification of diphtheria bacilli in cultures is not sufficient, and therefore we have added the isolation of these organisms in pure culture and inject guinea pigs to determine whether or not the organism is a true toxin producer.

The Central Laboratory is supplying all the other state laboratories with the special media required in their work. The largest demand is for media for growing diphtheria bacilli. In the period

covered by this report over forty thousand tubes of special diphtheria media have been prepared for us in the Central Laboratory.

The Central Laboratory is also doing the isolation and testing of diphtheria cultures for virulence and other special bacteriological work which these laboratories are not equipped to do.

Due to the large increase in the work, it became necessary last year to secure two new employees for the Central Laboratory. The work in the office, with the records and reports, became so heavy that another full time clerk was required. Requests for mailing cases and other materials supplied to the physicians and others came in so fast that it became necessary to secure someone to devote their full time to the preparation and mailing of packages.

Private laboratories in the state frequently request us to supply them with various kinds of media. These requests have all been refused because we have hardly had help enough to supply our own demand. If we desired to go into the business of supplying media for private laboratories we could keep a large force busy at that alone. This, of course, would enlarge the activity of the laboratory, but it does not seem to be necessary. Satisfactory media can be bought from commercial firms.

Private laboratories are seeking recognition by the State Board of Health in order that their reports may be official for the release of patients under quarantine. Because of this and also because the work in our State Cooperative Laboratories needs to be standardized, it has become necessary to establish certain standards for all laboratories doing Board of Health work.

In order to meet this situation, the director of the Central Laboratory has been asked to look into the qualification of technicians in charge of all laboratories seeking state recognition, and to prepare a public health laboratory manual to be used by the state laboratories. This manual will consist entirely of methods used in the Central Laboratory and will have the effect of standardizing the work in all state laboratories.

Cooperative Laboratories

The tables setting forth the work of the Cooperative Laboratories are drawn just as described for the Central Laboratory, and show the amount and type of work done in these laboratories. It does not seem necessary, therefore, to lengthen this report by reviewing the work of each of these laboratories.

It is worthy of special notice, however, that these laboratories received during this biennium a total of 44,651 specimens, which represents almost four times as much work as shown for them in the last biennial report.

They are better organized and at the present time every one of them is presided over by an experienced laboratory worker. All of the laboratories except the ones located in Beloit and Kenosha are under the direction of people who have been in state public health laboratories in other states.

In the case of Beloit the director has had no experience in a state public health laboratory, but she has had much valuable laboratory experience.

Mr. Miller, who has charge of the Kenosha laboratory, has been there a number of years and deserves special mention as a capable and conscientious worker.

Every person in the state laboratory service is a University graduate, and all but two are graduates from our State University.

The last table, XXXIX, shows the number of specimens received in the Central and other laboratories. This table shows that all the laboratories received a total of 109,419 specimens, which is an increase of 45,609 over the previous biennium.

New Work

In addition to the work described in this report there are other strictly public health matters which deserve attention. At present we are doing very little from the laboratory side in the control of typhoid fever. The water analysis which we do, of course, has some significance in the control of this disease, but there are other more direct procedures which may be used. Cultural examination of feces and urine, when done under the proper conditions, can be used to great advantage. Blood cultures also can be used to great advantage in making an early diagnosis. Blood cultures can be obtained ten days to two weeks earlier than it is usually possible to secure a positive widal reaction. The laboratory is doing very little stool and urine work, and practically no blood cultures.

This work is of such importance that it should be added to the routine work of the laboratories. The isolation of the typhoid bacillus from feces and urine is a difficult task and requires special experience and skill on the part of the bacteriologist. Special types of media also are required. It is obvious then, if this work is to be undertaken, additional personnel and funds to care for it must be provided. It is estimated that at least two thousand dollars addition to the budget will be necessary to properly take care of this work.

Our vaccine department has grown considerably in the last two years. We make a great many autogenous vaccines from cultures submitted for that purpose. Last year pertussis (whooping cough) vaccine was added to our list of regular prophylactic vaccines. We are now preparing typhoid-paratyphoid, pneumococcus and pertussis vaccines for prophylactic vaccines. The pertussis vaccine is also recommended by some clinicians as a beneficial therapeutic agent in cases of whooping cough. We are not making any claims for the potency of the vaccine either as a preventive or a cure for whooping cough. A demand for this vaccine was created by favorable reports in the medical journals and we have been supplying this demand as have many other public health laboratories. If this vaccine does have any virtue as a preventive against whooping cough, as there is some reason to believe it has, then it is of great importance that it be made available to the public just as typhoid and

paratyphoid vaccine. It has been our desire to collect some reliable statistics on the use of this vaccine. For this purpose we have distributed a good deal to city health departments asking for their cooperation. So far the reports have been fragmentary and usually consist of opinions of physicians who have used it in only a few cases. Plans are now being made whereby more satisfactory observations can be made.

Research

The increase in routine work has necessarily interrupted our research for long periods. We have, however, been able to keep up the work on the problems which we had started and to get something done on two new pieces of research.

The diphtheria work reported in the last report is still under investigation, many new and interesting phases of the work having developed. We have made one publication on the subject of diphtheria carriers. The importance of some of the work which we are doing was considerably minimized by the publication of papers by others bearing upon the same phases of the subject as that upon which we were working.

The new work deals with two problems in water analysis; one, the effect upon each other of two types of colon bacilli growing in the same tube; the other, the effect of certain strengths of gentian violet upon the growth of the two chief types of colon bacilli, Voges Proskauer positive and Methyl red positive, and the usefulness of this dye in preventing overgrowth of colon bacilli by ordinary saprophytes.

REPORT OF THE CENTRAL LABORATORY OF HYGIENE

July 1, 1920, to July 1, 1922

TABLE I

July, 1920							
Diphtheria	358—	93+	1?	26C.	20NG	2 Us.	500
Sputum	203—	59+	2 Us.				264
Typhoid	63—	15?	14+				92
Paratyphoid	92—						92
Rabies	3—						3
Water	126—	102+	8 Chem.	90 Special			326
Gonorrhea	64—	35+	9?				108
Miscellaneous							90
Not examined							26
							1,501
August, 1920							
Diphtheria	239—	85+	29C.	16NG	6?		375
Sputum	232—	84+					316
Typhoid	84—	9+	7?				100
Paratyphoid	100—						100
Rabies	1—	1+					2
Water	88—	82+	47 Special				217
Gonorrhea	67—	27+	10?				104
Miscellaneous							63
Not examined							26
							1,313

September, 1920								
Diphtheria	971—	63C.	99+	43NG	5?		.....	1,181
Typhoid	54—	26+	3?	1 Us.			.....	84
Paratyphoid	83—	1 Us.						84
Sputum	202—	88+	1 Us.				.....	291
Rabies	2—	7+					.....	9
Water	102—	130+	12C.	8 Chem.	60 Special		.....	312
Gonorrhea	71—	9?	30+				.....	110
Miscellaneous							.....	77
Not examined							.....	32
								2,180
October, 1920								
Diphtheria	2,898—	15?	101NG	168C.	249+		.....	3,431
Sputum	188—	64+					.....	252
Typhoid	79—	23+	1 Us.				.....	103
Paratyphoid	102—	1 Us.					.....	103
Rabies	2—	1+					.....	3
Water	136—	104+	12 Special	9 Chem.			.....	261
Gonorrhea	123—	35+	14?	1 Us.			.....	173
Miscellaneous							.....	75
Not examined							.....	31
								4,432
November, 1920								
Diphtheria	1,578—	217+	168C.	65NG	2?		.....	2,030
Sputum	191—	50+	1 Us.				.....	242
Typhoid	83—	9+	6 Us.				.....	98
Paratyphoid	92—		6 Us.				.....	98
Rabies		1+					.....	1
Water	143—	51+	2?	2 Us.	31 Special	10 Chem.	.....	239
Gonorrhea	88—	38+	12?				.....	138
Miscellaneous							.....	86
Not examined							.....	23
								2,955
December, 1920								
Diphtheria	2,218—	114C.	47NG	172+	6?		.....	2,557
Sputum	221—	56+	3 Us.				.....	280
Typhoid	82—	14+	2?				.....	98
Paratyphoid	98—						.....	98
Rabies	1—	1+					.....	2
Water	116—	34+	4 Chem.				.....	154
Gonorrhea	86—	28+	6?	3 Us.			.....	123
Miscellaneous							.....	58
Not examined							.....	36
								3,406
January, 1921								
Diphtheria	252+	971—	28NG	67C.	5?		.....	1,323
Sputum	76+	231—	2 Us.				.....	309
Typhoid	20+	61—	1 Us.	2?			.....	84
Paratyphoid		84—					.....	84
Rabies	4+	3—					.....	7
Water	32+	140—	2 Spec.	6 Chem.			.....	180
Gonorrhea	48+	111—	1 Us.	6?			.....	166
Miscellaneous							.....	77
Not examined							.....	28
								2,258
February, 1921								
Diphtheria	220+	1,358—	61NG	168C.	5?		.....	1,812
Sputum	60+	248—					.....	308
Typhoid	14+	52—	1 Us.	2?			.....	69
Paratyphoid		69—					.....	69
Rabies	5+	4—					.....	9
Water	38+	115—	3 Chem	34 Spec.			.....	190
Gonorrhea	43+	83—	2 Us.	22?			.....	150
Miscellaneous							.....	73
Not examined							.....	32
								2,712

March, 1921							
Diphtheria	839—	155C	47NG	217+	4?		1,262
Sputum	305—	5 Us.	81+				391
Typhoid	52—	2?	9+				63
Paratyphoid	63—						63
Rabies	1—	5+					6
Water	138—	48+	2 Us.	20 Chem.	22 Special		230
Gonorrhea	84—	50+	20?	2 Us.			156
Miscellaneous							93
Not examined							33
							2,297
April, 1921							
Diphtheria	858—	25NG	51C.	177+	13?		1,124
Sputum	291—	3 Uns.	76+				370
Rabies				1+			1
Typhoid	72—	7+	11?				90
Paratyphoid	90—						90
Water	140—	56+	26 Special				222
Gonorrhea	82—	48+	27?	4 Uns.			161
Miscellaneous							93
Not examined							28
							2,179
May, 1921							
Diphtheria	773—	48NG	8?	176+	60C.		1,065
Sputum	336—			100+	2 Us.		438
Rabies	4—			2+			6
Typhoid	49—	4?					58
Paratyphoid	58—						58
Water	92—	42+	2?	15 Spec.	5 Chem. 2C.		158
Gonorrhea	99—	27?	52+	3 Us.			181
Miscellaneous							92
Not examined							24
							2,080
June, 1921							
Diphtheria	344—	107+	17C.	11NG	6?		485
Sputum	282—	122+	3 Uns.				407
Rabies	2—						2
Typhoid	56—	7+	5?				68
Paratyphoid	68—						68
Water	121—	118+	8C.	7 Spec.	3 Chem.		257
Gonorrhea	73—	43+	16?	11 Uns.			143
Miscellaneous							99
Not examined							41
							1,570

TABLE II

July, 1921							
Diphtheria	280—	73+	19C.	24NG	4?		400
Sputum	261—	121+	3 Uns.				385
Rabies	2—						2
Typhoid	88—	17+	1 Uns.	3?			109
Paratyphoid	108—	1 Uns.					109
Water	125—	190+	10?	8 Spec.	5 Chem.		338
Gonorrhea	79—	46+	7 Uns.	11?			143
Miscellaneous							79
Not examined							24
							1,589
August, 1921							
Diphtheria	373—	68+	36C.	4?	10NG		491
Sputum	272—	81+	1?	4 Uns.			358
Typhoid	95—	28+	15?				138
Paratyphoid	136—	2?					138
Rabies	1—						1
Water	120—	328+	12 Spec.	1 Chem.			461
Gonorrhea	81—	57+	10?	4 Uns.			152
Miscellaneous							64
Not examined							33
							1,836

September, 1921							
Diphtheria	1,547—	186+	89C.	30NG	11?	1 Us.	1,864
Sputum	286—	97+	4 Uns.				387
Typhoid	107—	26+	19?	1 Uns.			153
Paratyphoid	152—	1 Uns.					153
Rabies	1—						1
Water	204—	270+	3Spec.	4 Uns.			481
Gonorrhea	65—	42+	13?	6 Uns.			126
Miscellaneous							74
Not examined							40
							3,279
October, 1921							
Diphtheria	3,090—	19?	222C.	385+	62NG		3,778
Sputum	298—	110+	3 Uns.				411
Typhoid	72—	36+	22?				130
Paratyphoid	130—						130
Rabies		2+					2
Water	160—	142+	2 Chem.	5 Spec.			309
Gonorrhea	80—	56+	33?	7 Uns.			176
Miscellaneous							73
Not examined							49
							5,058
November, 1921							
Diphtheria	2,563—	537+	14?	160C.	56NG		3,330
Sputum	302—	109+	1 Uns.				412
Typhoid	78—	24+	15?				117
Paratyphoid	116—		1?				117
Rabies	3—						3
Water	123—	76+					199
Gonorrhea	94—	57+	18?	6 Uns.			175
Miscellaneous							47
Not examined							42
							4,442
December, 1921							
Diphtheria	1,785—	371+	181C.	75NG	18?		2,430
Sputum	295—	74+	1 Uns.				370
Typhoid	59—	10+	9?				78
Paratyphoid	78—						78
Water	94—	82+	9 Spec.	6 Uns.			191
Gonorrhea	102—	46+	17?	3 Uns.			168
Rabies		1+					1
Miscellaneous							79
Not examined							20
							3,415
January, 1922							
Diphtheria	1,529—	370+	61NG	113C.	11?		2,084
Sputum	385—	77+	3 Uns.				465
Typhoid	49—	7+	6?				62
Paratyphoid	62—						62
Rabies	3—	1+					4
Water	67—	16+	4?	8 Chem.			95
Gonorrhea	98—	32+	30?	3 Uns.			163
Miscellaneous							81
Not examined							29
							3,045
February, 1922							
Diphtheria	1,899—	289+	121C.	73NG	12?		2,394
Sputum	346—	59+					405
Typhoid	56—	5+	2?				63
Paratyphoid	63—						63
Rabies	5—						5
Water	60—	20+	10 Uns.	2 Spec.			92
Gonorrhea	101—	23+	19?	1 Uns.			144
Miscellaneous							98
Not examined							20
							3,284

March, 1922							
Diphtheria	1,558—	327+	55NG	129C.	9?		2,078
Sputum	374—	83+	3 Uns.				460
Typhoid	49—	10+	4?				63
Paratyphoid	63—						63
Water	112—	43+	2 Spec.	1 Chem.			158
Gonorrhea	109—	49+	21?	7 Us.			186
Rabies	1—						1
Miscellaneous							104
Not examined							40
							3,153
April, 1922							
Diphtheria	1,373—	231+	39NG	11?	64C.		1,718
Sputum	358—	110+	3 Uns.				471
Typhoid	91—	17+	5?				113
Paratyphoid	113—						113
Rabies	4—						4
Gonorrhea	110—	34+	14?	2 Us.			160
Water	120—	83+	5?	53 Chem.			261
Miscellaneous							78
Not examined							27
							2,945
May, 1922							
Diphtheria	592—	109+	9NG	32C.	7?		749
Sputum	381—	122+	1 Us.				504
Typhoid	50—	13+	9?				72
Paratyphoid	72—						72
Rabies	1—						1
Water	118—	103+	1 Spec.	17 Chem.			239
Gonorrhea	96—	25+	24?	5 Us.			150
Miscellaneous							48
Not examined							55
							1,890
June, 1922							
Diphtheria	472—	95+	29C.	20NG	3?		619
Sputum	328—	109+	2 Us.				439
Typhoid	58—	18+	9?				85
Paratyphoid	85—						85
Gonorrhea	82—	46+	22?	5 Us.			155
Water	229—	184+	8 Chem.	2 Spec.			423
Rabies	2—	1 Us.					3
Miscellaneous							105
Not examined							35
							1,949

TABLE III

July 1, 1920, to July 1, 1921							
Diphtheria	13,405—	1,086C.	512NG	2,064+	76?	2 Us.	17,145
Sputum	2,930—	916+	22 Us.				3,868
Typhoid	787—	157+	53?	10 Us.			1,007
Paratyphoid	999—	8+					1,007
Rabies	23—	28+					51
Water 22C.	1,457—	837+	76 Ch.	4?	4 Us.	346 Spec.	2,746
Gonorrhea	1,031—	477+	178?	27 Us.			1,713
Miscellaneous							976
Not examined							370
							28,883

Number of doses of triple vaccine	3,420
Number of diphtheria containers sent	4,561
Number of gonorrhea containers sent	1,548
Number of towns sending specimens	508
Number of doctors sending specimens	1,375

TABLE IV

July 1, 1921, to July 1, 1922							
Diphtheria	17,061—	123?	1,195C.	3,041+	514NG	1 Us.	21,935
Sputum	3,886—	1,152+	28 Us.	1?			5,067
Typhoid	852—	211+	118?	2 Us.			1,183
Paratyphoid	1,178—	3?	2 Us.				1,183
Water	1,532—	1,537+	95Ch.	44 Spec. 19?		20 Us.	3,247
Gonorrhea	1,097—	513+	232?	56 Us.			1,898
Rabies	23—	4+	1 Us.				28
Miscellaneous							930
Not examined							414
							35,885

Number of doses of triple vaccine	5,631
Number of doses of pertussis vaccine	2,390
Number of diphtheria containers sent	15,214
Number of sputum containers sent	6,976
Number of gonorrhea containers sent	1,439
Number of towns represented	823
Number of doctors sending specimens	1,378

Swabs for diagnosis	8619—	903+	382C.	254NG	108?	1 Us.
Swabs for release	8442—	2138+	813C.	262NG	15?	

TABLE V

July 1, 1920, to July 1, 1922							
Diphtheria	30,466—	109	2,281C	5,105+	1,026N	3 Us	39,080
Sputum	6,816—	2,068+	50 Us	1?			8,935
Typhoid	1,639—	368+	171?	12 Us.			2,190
Paratyphoid	2,177—	3?	2 Us	8+			2,190
Water 22C.	2,989—	2,374+	171Chem.	390 Spec.	24 Us.	23?	5,993
Gonorrhea	2,128—	990+	410?	83Us			3,611
Rabies	46—	32+	1 Us.				79
Miscellaneous							1,906
Not examined							784
							64,768

Number of doses of triple vaccine	9,051
Number of doses of pertussis vaccine	2,390
Number of diphtheria containers sent	27,107
Number of sputum containers sent	11,537
Number of gonorrhea containers sent	2,987

Swabs for diagnosis	18,009—	1,671+	917C.	580NG	173?	3 Us.
Swabs for release	12,457—	3,434+	1,364C.	446NG	26?	

REPORT OF THE BELOIT LABORATORY

May, 1921 to July, 1922

TABLE VI

May, 1921				
Diphtheria	5—			5
Sputum	6—	3+		9
Typhoid	1—			1
Paratyphoid	1—			1
Gonorrhea	7—	21+	4?	32
Miscellaneous				35
				83

June, 1921				
Diphtheria	21—	8+	3?	32
Sputum	24—	5+		29
Typhoid	4—			4
Paratyphoid	4—			4
Gonorrhea	39—	30+	10?	79
Miscellaneous				56
				204

July, 1921				
Diphtheria	25—	2+		27
Sputum	11—	1+		12
Typhoid	2—	1+		3
Paratyphoid	3—			3
Gonorrhea	25—	26+	5?	53
Miscellaneous				78
				179

August, 1921			
Diphtheria	25—	4+	29
Sputum	6—		6
Typhoid	7—	4+	11
Water	3—	1+	4
Gonorrhea	29—	21+	50
Miscellaneous			78
			178

September, 1921				
Diphtheria	27—	15+		42
Sputum	19—	3+		22
Typhoid	4—	2+		6
Water	1—			1
Gonorrhea	38—	32+		70
Miscellaneous				65
				206
October, 1921				
Diphtheria	221—	57+		278
Sputum	17—	4+		21
Typhoid	4—	4+		8
Water	2—			2
Gonorrhea	32—	23+		55
Miscellaneous				49
				413
November, 1921				
Diphtheria	156—	78+		234
Sputum	6—	9+		15
Typhoid	2—			2
Gonorrhea	23—	23+		46
Miscellaneous				71
				368
December, 1921				
Diphtheria	580—	132+		712
Sputum	18—	7+		25
Typhoid	1—			1
Gonorrhea	47—	18+		65
Miscellaneous				57
				860
January, 1922				
Diphtheria	333—	37+		370
Sputum	28—	3+		31
Gonorrhea	24—	25+		49
Miscellaneous				68
				518
February, 1922				
Diphtheria	109—	5+		114
Sputum	18—	6+		24
Typhoid	2—			2
Gonorrhea	46—	17+		63
Miscellaneous				59
				262
March, 1922				
Diphtheria	2+	28—		30
Sputum	4+	30—		34
Typhoid		4—		4
Gonorrhea	32+	24—		56
Miscellaneous				93
				217
April, 1922				
Diphtheria	5+	25—		30
Sputum	4+	24—		28
Gonorrhea	40+	41—		81
Miscellaneous				66
				205
May, 1922				
Diphtheria	11+	52—		63
Sputum	2+	22—		24
Typhoid		2—		2
Gonorrhea	26+	27—		53
Miscellaneous				83
				225
June, 1922				
Diphtheria	24+	68—		92
Sputum	1+	12—		13
Typhoid		9—		9
Gonorrhea	20+	37—		57
Miscellaneous				90
				261
May and June, 1921				
Diphtheria	26—	8+	3?	37
Sputum	30—	8+		38
Typhoid	5—			5
Paratyphoid	5—			5
Gonorrhea	46—	51+	14?	111
Miscellaneous				91
				287
July, 1921 to July, 1922				
Diphtheria	1,649—	372+		2,021
Sputum	211—	44+		255
Typhoid	37—	11+		48
Paratyphoid	3—			3
Gonorrhea	393—	303+	5?	701
Water	6—	1+		7
Miscellaneous				857
				3,892

TABLE VII.

May, 1921 to July, 1922				
Diphtheria	1,675—	380+	3?	2,058
Sputum	241—	52+		293
Typhoid	42—	11+		53
Paratyphoid	8—			8
Gonorrhea	439—	354+	19?	812
Water	6—	1+		7
Miscellaneous				948
				4,179

REPORT OF THE GREEN BAY LABORATORY

November, 1920 to July, 1922

TABLE VIII

November, 1920			
Diphtheria	21—		21
Water	4—	1+	5
Gonorrhea		3+	3
Miscellaneous			21
			50
December, 1920			
Diphtheria	44—	13+	57
Sputum	5—	2+	7
Typhoid	1—		1
Paratyphoid	1—		1
Water	2—		2
Miscellaneous			2
			70

January, 1921					
Diphtheria	23—	3+			26
Sputum	1—				1
Typhoid	2—				2
Gonorrhea	4—				4
Water	2—				2
Miscellaneous					2
					37
February, 1921					
Diphtheria	153—	13+			166
Sputum	25—	10+			35
Typhoid	1—	1+			2
Paratyphoid	2—				2
Gonorrhea	3—	3+			6
Water	1—				1
					212
March, 1921					
Diphtheria	19—	5+			24
Sputum	4—	1+			5
Typhoid	2—				2
Paratyphoid	2—				2
Water	3—				3
Gonorrhea	1—	2+			3
Miscellaneous					2
					41
April, 1921					
Diphtheria	17—	9+			26
Sputum	2—				2
Water	2—				2
Gonorrhea	2—	4+			6
Miscellaneous					27
					63
May, 1921					
Diphtheria	286—	36+			322
Sputum	6—				6
Water	3—				3
Gonorrhea	5—	4+			9
Miscellaneous					18
					18
					358
June, 1921					
Diphtheria	98—	10+			108
Sputum	17—	10+			27
Typhoid		1+			1
Paratyphoid	1—				1
Water	3—				3
Gonorrhea	7—	5+			12
Miscellaneous					12
					164

TABLE IX

July, 1921					
Diphtheria	34—	14+	2 Us.		50
Sputum	16—	4+			20
Typhoid	1—				1
Paratyphoid	1—				1
Gonorrhea		5+	2 Us.		7
Water	9—	2+			11
Miscellaneous					23
					113
August, 1921					
Diphtheria	283—	41+			324
Sputum	6—	1+			7
Typhoid	5—	2+			7
Paratyphoid	6—	1+			7
Gonorrhea	3—	4+			7
Water	2—				2
Miscellaneous					6
					360
September, 1921					
Diphtheria	210—	30+			240
Sputum	7—	9+			16
Gonorrhea	5—	8+	1?		14
Typhoid	2—	1+			3
Paratyphoid	3—				3
Miscellaneous					14
					290
October, 1921					
Diphtheria	416—	32+			448
Sputum	6—				6
Gonorrhea	10—	5+	2?		17
Typhoid	5—	3+			8
Paratyphoid	8—				8
Miscellaneous					28
					515
November, 1921					
Diphtheria	7C. 865—	27+	20?		919
Sputum	7—				7
Gonorrhea	11—	3+	6?		20
Typhoid	8—	1+	1?		10
Paratyphoid	10—				10
Water	5—	4+	2?		11
Miscellaneous					12
					989
December, 1921					
Diphtheria	357—	23+			380
Sputum	13—				13
Gonorrhea	4—	3+	5?		12
Typhoid	5—	1+			6
Paratyphoid	6—				6
Water	8—	1+			9
Miscellaneous					15
					441
January, 1922					
Diphtheria	238—	4+			242
Sputum	14—				14
Gonorrhea	4—	1+	4?		9
Typhoid	4—	2+			6
Water	9—				9
Miscellaneous					11
					291
February, 1922					
Diphtheria	123—	9+			132
Sputum	9—	2+			11
Gonorrhea	3—	1+	2?		6
Typhoid	7—				7
Water	22—				22
Miscellaneous					21
					209

March, 1922				
Diphtheria	144—	7+		151
Sputum	10—	1+		11
Gonorrhea	2—		1?	3
Typhoid	4—	1+		5
Water	21—			21
Miscellaneous				32
				223

April, 1922			
Diphtheria	59—	3+	62
Sputum	11—	1+	12
Gonorrhea	5—		5
Typhoid	2—	1+	3
Water	4—		4
Miscellaneous			34
			120

May, 1922				
Diphtheria	4+	75—		79
Sputum	2+	16—		18
Typhoid	3+	1—	1?	5
Gonorrhea	3+	9—	1?	13
Water	1+	9—		10
Miscellaneous				29
				154

June, 1922				
Diphtheria	3+	68—		71
Sputum	1+	7—		8
Typhoid	3+	4—		7
Gonorrhea	3+	6—	2?	11
Water	18+	31—		49
Miscellaneous				35
				181

TABLE X

November, 1920 to July, 1921			
Diphtheria	661—	89+	750
Sputum	60—	23+	83
Typhoid	6—	2+	8
Paratyphoid	6—		6
Gonorrhea	22—	21+	43
Water	20—	1+	21
Miscellaneous			81
			995

TABLE XI

July, 1921 to July, 1922					
Diphtheria	2,872—	197+	20?	7C. 2 Us.	3,098
Sputum	122—	21+			143
Typhoid	48—	18+	2?		68
Paratyphoid	34—	1+			35
Gonorrhea	62—	36+	24?	2 Us.	124
Water	120—	26+	2?		148
Miscellaneous					260
					3,876

TABLE XII

November, 1920 to July, 1922					
Diphtheria	3,533—	286+	20?	7C. 2 Us.	3,848
Sputum	182—	44+			226
Typhoid	54—	20+	2?		76
Paratyphoid	40—	1+			41
Gonorrhea	84—	57+	24?	2 Us.	167
Water	140—	27+	2?		169
Miscellaneous					344
					4,871

REPORT OF THE KENOSHA LABORATORY

July, 1920 to July, 1922

TABLE XIII

July, 1920				
Diphtheria	60—	13+	2ND	75
Sputum	22—	15+		37
Typhoid	2—	2+		4
Water	3—	1+		4
Gonorrhea 5?	16—	16+	1ND 6Ob.	44
Miscellaneous				44
				208
August, 1920				
Diphtheria	26—	4+		30
Sputum	13—	2+		15
Typhoid	2—	1+		3
Water	4—			4
Gonorrhea 2?	21—	13+	8 Ob.	44
Miscellaneous				41
				137
September, 1920				
Diphtheria	104—	13+	5ND 3NG	125
Sputum	13—	6+		19
Typhoid	3—			3
Water	5—	1+		6
Gonorrhea 2?	13—	8+	2 Ob.	25
Miscellaneous				35
				213
October, 1920				
Diphtheria	110—	18+		128
Sputum	10—	2+		12
Typhoid	2—			2
Gonorrhea	21—	7+		28
Water	4—			4
Miscellaneous				66
				242
November, 1920				
Diphtheria	127—	23+		150
Sputum	17—	7+		24
Typhoid	6—			6
Paratyphoid	2—			2
Gonorrhea	20—	7+		27
Miscellaneous				57
				270
December, 1920				
Diphtheria	121—	6+		127
Sputum	25—	6+		31
Typhoid	6—			6
Water	5—			5
Gonorrhea	25—	8+		33
Miscellaneous				59
				261
January, 1921				
Diphtheria	177—	9+		186
Sputum	17—	5+		22
Water	5—			5
Gonorrhea	12—	7+		19
Miscellaneous				57
				289
February, 1921				
Diphtheria	150—	15+		165
Sputum	26—	5+		31
Water	5—			5
Gonorrhea	15—	9+		24
Miscellaneous				55
				280
March, 1921				
Diphtheria	77—	19+		96
Sputum	17—	6+		23
Typhoid	2—			2
Water	5—			5
Gonorrhea	22—	3+		25
Miscellaneous				76
				227
April, 1921				
Diphtheria	108—	6+		114
Sputum	19—	24+		43
Water	5—			5
Gonorrhea	5—	6+		11
Miscellaneous				120
				293
May, 1921				
Diphtheria	35—	2+		37
Sputum	24—	7+		31
Typhoid	5—			5
Paratyphoid	1—			1
Gonorrhea	14—	6+		20
Water	6—		1?	7
Miscellaneous				77
				178
June, 1921				
Diphtheria	34—	1+		35
Sputum	12—	9+		21
Water	6—	1+		7
Gonorrhea	19—	4+		23
Typhoid	2—			2
Miscellaneous				95
				183
July, 1921				
Diphtheria	23—	8+		31
Sputum	14—	3+		17
Typhoid	4—			4
Paratyphoid	1—			1
Gonorrhea	15—	8+		23
Water	9—			9
Miscellaneous				70
				155
August, 1921				
Diphtheria	69—	5+		74
Sputum	18—	7+		25
Typhoid	7—			7
Paratyphoid	5—			5
Gonorrhea	20—	8+		28
Water	5—	1+		6
Miscellaneous				117
				262
September, 1921				
Diphtheria	188—	32+		220
Sputum	15—	3+		18
Gonorrhea	22—	8+		30
Typhoid	9—	1+		10
Paratyphoid	2—			2
Water	5—	3+		8
Miscellaneous				69
				357

October, 1921			
Diphtheria	316—	45—	361
Sputum	16—	7+	23
Gonorrhea	19—	3+	22
Typhoid	8—		8
Water	9—		9
Miscellaneous			104
			527
November, 1921			
Diphtheria	539—	62+	601
Sputum	28—	9+	37
Typhoid		1+	1
Gonorrhea	18—	7+	25
Water	6—		6
Miscellaneous			79
			749
December, 1921			
Diphtheria	492—	57+	549
Sputum	23—	2+	25
Gonorrhea	20—	12+	32
Typhoid	1—		1
Water	6—		6
Miscellaneous			111
			724
January, 1922			
Diphtheria	49+	363—	412
Sputum	8+	20—	28
Typhoid		1—	1
Paratyphoid		1—	1
Gonorrhea	6+	19—	25
Water	1+	6—	7
Miscellaneous			268
			742
February, 1922			
Diphtheria	26+	235—	261
Sputum	2+	19—	21
Gonorrhea	6+	19—	25
Typhoid		2—	2
Paratyphoid		2—	2
Water	2+	3—	5
Miscellaneous			109
			425
March, 1922			
Diphtheria	16+	201—	217
Sputum	7+	34—	41
Typhoid		2—	2
Paratyphoid		1—	1
Water	4+	5—	9
Gonorrhea	4+	20—	24
Miscellaneous			93
			387
April, 1922			
Diphtheria	22+	110—	132
Sputum	9+	26—	35
Gonorrhea	7+	8—	15
Water		10—	10
Miscellaneous			87
			279
May, 1922			
Diphtheria	7+	77—	84
Sputum	7+	30—	37
Typhoid	3+	2—	5
Paratyphoid		2—	2
Water	1+	7—	8
Gonorrhea	6+	23—	29
Miscellaneous			103
			268
June, 1922			
Diphtheria	47—		47
Sputum	36—	12+	48
Gonorrhea	25—	5+	30
Typhoid	1—		1
Paratyphoid	1—		1
Water	10—		10
Miscellaneous			125
			262

TABLE XV

July, 1920 to July, 1921				
Diphtheria	1,129—	129+	7ND 3NG	1,268
Sputum	215—	94+		309
Typhoid	30—	3+		33
Paratyphoid	3—			3
Water	57—	3+	1?	61
Gonorrhea 9?	203—	94+	16Ob.1ND	323
Miscellaneous				784
				2,781

TABLE XVI

July, 1921 to July, 1922				
Diphtheria	2,660—	329+		2,989
Sputum	279—	76+		355
Typhoid	37—	5+		42
Paratyphoid	15—			15
Gonorrhea	228—	80+		308
Water	81—	12+		93
Miscellaneous				1,335
				5,137

TABLE XVII

July, 1920 to July, 1922				
Diphtheria	3,789—	458+	7ND 3NG	4,257
Sputum	494—	170+		664
Typhoid	67—	8+		75
Paratyphoid	18—			18
Gonorrhea 9?	431—	174+	16Ob.1ND	631
Water	138—	15+	1?	154
Miscellaneous				2,119
				7,918

REPORT OF THE OSHKOSH LABORATORY

July, 1920 to July, 1922

TABLE XVIII

July, 1920					
Diphtheria	3—	4+		.....	7
Sputum	27—	16+	4ND	.....	47
Typhoid 3?	2—	3+		.....	8
Paratyphoid	6—			.....	6
Water	8—	7+		.....	15
Gonorrhea 2?		4+		.....	6
Miscellaneous				.....	95
Not examined				.....	3
					187
August, 1920					
Diphtheria	6—	6+	2NG	.....	14
Sputum	16—	7+		.....	23
Typhoid 4?	6—	1+		.....	11
Paratyphoid	10—		1?	.....	11
Water	3—	1+		.....	4
Gonorrhea 7?	3—	5+		.....	15
Miscellaneous				.....	122
					200
September, 1920					
Diphtheria	18—	6+		.....	24
Sputum	19—	4+		.....	23
Typhoid	1—			.....	1
Paratyphoid	1—			.....	1
Water	9—	4+		.....	13
Gonorrhea 9?	4—	6+		.....	19
Miscellaneous				.....	117
					198
October, 1920					
Diphtheria	38—	12+	2ND 2NG	....	54
Sputum	21—	15+		....	36
Typhoid	2—	1+		....	3
Paratyphoid	3—			....	3
Water	7—	8+		....	15
Gonorrhea 4?	3—	10+	1ND 3 Ob.	....	21
Miscellaneous				....	140
					272
November, 1920					
Diphtheria	72—	20+	3NG	.....	95
Sputum	29—	19+	3ND	.....	51
Typhoid	6—		1ND	.....	7
Paratyphoid	6—		1ND	.....	7
Water	9—	7+		.....	16
Gonorrhea 1?	2—	1+		.....	4
Miscellaneous				.....	114
					294
December, 1920					
Diphtheria	63—	18+		.....	81
Sputum	13—	10+	1ND	.....	24
Typhoid	5—			.....	5
Paratyphoid	5—			.....	5
Water		2+		.....	2
Gonorrhea 6?	3—	10+		.....	19
Miscellaneous				.....	90
					226
January, 1921					
Diphtheria	33—	15+	2NG 1ND	.....	51
Sputum	39—	19+		.....	58
Typhoid	5—			.....	5
Paratyphoid	5—			.....	5
Water	4—	2+		.....	6
Gonorrhea 7?	5—	20+		.....	32
Miscellaneous				.....	133
					290
February, 1921					
Diphtheria	28—	8+	4ND	.....	40
Sputum	20—	9+	1ND	.....	30
Typhoid	3—			.....	3
Paratyphoid	3—			.....	3
Water	2—	1+		.....	3
Gonorrhea 8?	5—	11+		.....	24
Miscellaneous				.....	120
					223
March, 1921					
Diphtheria	23—	14+	1ND	.....	38
Sputum	29—	11+		.....	40
Typhoid	1—			.....	1
Paratyphoid	1—			.....	1
Water	2—			.....	2
Gonorrhea	8—	13+	17?	.....	38
Miscellaneous				.....	182
					302
April, 1921					
Diphtheria	17—	4+	4ND	.....	25
Sputum	37—	15+	1ND	.....	53
Typhoid	4—			.....	4
Paratyphoid	4—			.....	4
Water	3—	4+		.....	7
Gonorrhea	9—	7+	9?	.....	25
Miscellaneous				.....	124
					242
May, 1921					
Diphtheria	10—	3+		.....	13
Sputum	31—	15+	1ND	.....	47
Typhoid	7—			.....	7
Paratyphoid	7—			.....	7
Water	3—	2+		.....	5
Gonorrhea	9—	8+	10?	.....	27
Miscellaneous				.....	114
					220
June, 1921					
Diphtheria	108—	59+		.....	167
Sputum	29—	8+		.....	37
Typhoid	7—			.....	7
Paratyphoid	7—			.....	7
Water	6—	4+		.....	10
Gonorrhea	10—	14+	11?	.....	35
Miscellaneous				.....	85
					348

TABLE XIX

July, 1921					
Diphtheria	56—	6+			62
Sputum	17—	11+	8ND		36
Water	15—	12+	2ND		29
Gonorrhea	10—	9+	14?		33
Miscellaneous					125
					285
August, 1921					
Diphtheria	47—	4+			51
Sputum	31—	21+			52
Typhoid	1—				1
Water	12—	7+			19
Gonorrhea	30—	10+			40
Miscellaneous					89
					252
September, 1921					
Diphtheria	96—	32+			126
Sputum	7—	6+			13
Water	4—				4
Gonorrhea	6—	8+	2?		16
Miscellaneous					59
					218
October, 1921					
Diphtheria	566—	100+			666
Sputum	26—	19+	1NE		46
Water	24—	3+			27
Gonorrhea	2—	12+	6?		20
Miscellaneous					48
					807
November, 1921					
Diphtheria	1,521—	172+	10C.1NG		1,704
Sputum	9—	3+			12
Water	16—	4+			20
Gonorrhea 2?	2—	7+			11
Miscellaneous					14
Not examined					9
					1,770
December, 1921					
Diphtheria	1,161—	170+			1,331
Sputum	30—	18+			48
Gonorrhea	4—	7+			16
Water	6—	5+			11
Miscellaneous					44
					1,450
January, 1922					
Diphtheria	84+	481—			565
Sputum	8+	25—			33
Gonorrhea	11+	5—	11?	2 Us.	29
Typhoid		1—			1
Paratyphoid		1—			1
Water		6—			6
Miscellaneous					73
					708
February, 1922					
Diphtheria	27+	175—			202
Sputum	8+	23—	1 Us.		32
Gonorrhea	3+		1 Us.	13?	17
Typhoid		1—			1
Paratyphoid		1—			1
Water		2—			2
Miscellaneous					91
					346
March, 1922					
Diphtheria	5+	88—			93
Sputum	23+	25—			48
Typhoid		1—			1
Paratyphoid		1—			1
Gonorrhea	2+	2—	1 Us.	1?	6
Water		21—			21
Miscellaneous					110
					280
April, 1922					
Diphtheria	4+	35—			39
Sputum	10+	29—			39
Gonorrhea	8+	1—			9
Typhoid	1+	1—			2
Paratyphoid		2—			2
Water	3+	17—			20
Miscellaneous					106
					220
May, 1922					
Diphtheria	4+	94—			98
Sputum	17+	12—			29
Gonorrhea	17+	1—	9?	2 Us.	29
Typhoid	1+	2—			3
Paratyphoid		3—			3
Water	19+	31—			50
Miscellaneous					74
					286
June, 1922					
Diphtheria	14+	122—			136
Sputum	18+	29—			47
Gonorrhea	12+	2—	9?	1Ob. 1Us.	25
Typhoid	+		1?		1
Paratyphoid		1—			1
Water	25+	15—	5?		45
Miscellaneous					93
					348

TABLE XX

July, 1920 to July, 1921						
Diphtheria	419—	169+	9NG	12ND		609
Sputum	310—	148+		11ND		469
Typhoid	49—	4+	8?	1ND		62
Paratyphoid	58—		1?	1ND		60
Gonorrhea	61—	109+	3 Ob.	1ND	91?	265
Water	56—	42+				98
Miscellaneous						1,436
Not examined						3
						3,002

TABLE XXI

July, 1921 to July, 1922					
Diphtheria	4,438—	622+	10C,	3NG	5,073
Sputum	263—	162+	8ND	1 Us.	434
Typhoid	7—	2+	1?		10
Paratyphoid	9—				9
Gonorrhea	65—	106+	75?	7 Us. 1 Ob.	254
Water	169—	78+	2ND	5?	254
Miscellaneous					926
Not examined					10
					6,970

TABLE XXII

July, 1920 to July, 1922					
Diphtheria	4,857—	791+	10C.	12NG 12ND	5,682
Sputum	573—	310+	19ND	1 Us.	903
Typhoid	56—	6+	9?	1ND	72
Paratyphoid	67—		1?	1ND	69
Gonorrhea 1ND	126—	215+	166?	7 Us. 4 Ob.	519
Water	225—	120+	2ND	5?	352
Miscellaneous					2,362
Not examined					13
					9,972

REPORT OF THE RHINELANDER LABORATORY

July, 1920 to July, 1922

TABLE XXIII

July, 1920					
Diphtheria	12—			2 Us.	14
Sputum	39—	7+	1ND		47
Typhoid	3—	2+			5
Paratyphoid	5—				5
Water	3—	5+			8
Gonorrhea	15—	7+	7?		29
Miscellaneous					32
					140

August, 1920				
Diphtheria	18—	2+		20
Sputum	29—	5+		34
Typhoid	8—	3+		11
Paratyphoid	11—			11
Water		3+		3
Gonorrhea	12—	4+	5?	21
Miscellaneous				19
				119

September, 1920				
Diphtheria	31—	3+		34
Sputum	34—	6+		40
Typhoid	8—			8
Paratyphoid	8—			8
Water	4—	7+	3?	14
Gonorrhea	6—	4+	3?	13
Miscellaneous				20
				137

October, 1920				
Diphtheria	61—	16+		77
Sputum	56—	24+		80
Typhoid	5—			5
Paratyphoid	5—			5
Water	8—			8
Gonorrhea	9—	19+	6?	34
Miscellaneous				24
				233

November, 1920				
Diphtheria	29—	6+		35
Sputum	48—	12+		60
Typhoid	10—	1+		11
Paratyphoid	11—			11
Water	4—	1+		5
Gonorrhea	15—	5+	6?	26
Miscellaneous				30
				178

December, 1920				
Diphtheria	19—	5+		24
Sputum	62—	20+		82
Typhoid	7—	2+		9
Paratyphoid	9—			9
Water	1—			1
Gonorrhea	16—	6+		22
Miscellaneous				23
				170

January, 1921				
Diphtheria	56—	8+		64
Sputum	63—	16+		79
Typhoid	3—			3
Paratyphoid	3—			3
Water	3—	1+		4
Gonorrhea	18—	1+	4?	23
Miscellaneous				22
				198

February, 1921				
Diphtheria	95—	3+		98
Sputum	49—	5+		54
Typhoid	4—			4
Paratyphoid	4—			4
Gonorrhea	7—	4+	5?	16
Water	2—	8+		10
Miscellaneous				26
				212

March, 1921				
Diphtheria	100—	4+		104
Sputum	68—	19+		87
Typhoid	3—			3
Paratyphoid	3—			3
Water	3—	3+	3?	9
Gonorrhea	12—	3+	4?	19
Miscellaneous				32
				257
April, 1921				
Diphtheria	55—	6+		61
Sputum	39—	9+		48
Typhoid	6—	1+		7
Paratyphoid	7—			7
Water	3—	6+	1?	10
Gonorrhea	3—	5+	1?	9
Miscellaneous				47
				189
May, 1921				
Diphtheria	88—	14+		102
Sputum	46—	9+		55
Typhoid	3—			3
Paratyphoid	3—			3
Water	8—	6+	1?	15
Gonorrhea	6—	1+	3?	10
Miscellaneous				38
				226
June, 1921				
Diphtheria	15—	4+		19
Sputum	64—	15+		79
Typhoid	8—	1+		9
Paratyphoid	9—			9
Water	8—	5+	1?	14
Gonorrhea	6—	12+		18
Miscellaneous				5
				153

TABLE XXIV

July, 1921				
Diphtheria	18—	10+		28
Sputum	46—	18+		64
Typhoid	10—	1+		11
Paratyphoid	11—			11
Gonorrhea	3—	9+		12
Water	4—	5+		9
Miscellaneous				25
				160
August, 1921				
Diphtheria	48—	10+		58
Sputum	76—	14+		90
Typhoid	13—	1+		14
Paratyphoid	14—			14
Gonorrhea	20—	2+	6?	28
Water	5—	6+		11
Miscellaneous				54
				269
September, 1921				
Diphtheria	35—	7+		42
Sputum	67—	21+		88
Typhoid	12—	10+	6?	28
Paratyphoid	28—			28
Gonorrhea	17—	6+	5?	28
Water	6—	6+		12
				226
October, 1921				
Diphtheria	216—	19+		235
Sputum	33—	14+		47
Typhoid	4—	12+		16
Paratyphoid	16—			16
Gonorrhea	12—	4+	2?	18
Water	14—	21+	1?	36
Miscellaneous				35
				403
November, 1921				
Diphtheria	17+	75—		92
Sputum	20+	62—		82
Typhoid	2+	4—	1?	7
Paratyphoid		7—		7
Gonorrhea	7+	15—	8?	30
Water	2+	3—		6
Miscellaneous				41
				264
December, 1921				
Diphtheria	15+	105—		120
Sputum	18+	50—		68
Typhoid	1+	7—		8
Paratyphoid		8—		8
Gonorrhea	7+	10—	6?	23
Water		5—		5
Miscellaneous				29
				261
January, 1922				
Diphtheria	8+	192—		200
Sputum	18+	61—		79
Typhoid	3+	6—		9
Paratyphoid		9—		9
Gonorrhea	6+	6—	2?	14
Water	1+	2—		3
Miscellaneous				23
				337
February, 1922				
Diphtheria	3+	157—		160
Sputum	11+	63—		74
Typhoid		2—		2
Paratyphoid		2—		2
Gonorrhea	3+	7—	4?	14
Water		3—		3
Miscellaneous				34
				289
March, 1922				
Diphtheria	2+	48—		50
Sputum	15+	71—		86
Typhoid		6—		6
Paratyphoid		6—		6
Gonorrhea	1+	16—	2?	19
Water		3—		3
Miscellaneous				34
				204
April, 1922				
Diphtheria	5+	55—		60
Sputum	46+	31—		77
Typhoid		7—		7
Paratyphoid		7—		7
Gonorrhea	5+	5—		10
Water	1+	1—		2
Miscellaneous				41
				204

May, 1922				
Diphtheria		32—	.....	32
Sputum	14+	57—	.....	71
Typhoid	3+	7—	.....	10
Paratyphoid		10—	.....	10
Gonorrhea	1+	11—	.....	12
Water	7+	13—	.....	20
Miscellaneous			.....	47
				202

June, 1922				
Diphtheria	7+	38—	.....	45
Sputum	20+	61—	.....	81
Typhoid	3+	10—	.....	13
Paratyphoid		12—	.....	12
Gonorrhea	2+	4—	.....	6
Water	14+	12—	.....	26
Miscellaneous			.....	38
				221

July, 1920 to July, 1921				
Diphtheria	579—	71+	2 Us.	 652
Sputum	597—	147+	1ND	 745
Typhoid	68—	10+		 78
Paratyphoid	78—			 78
Water	47—	45+	9?	 101
Gonorrhea	125—	71+	44?	 240
Miscellaneous				 318
				2.212

TABLE XXV

July, 1921 to July, 1922				
Diphtheria	1,019—	103+		 1,122
Sputum	678—	229+		 907
Typhoid	88—	36+	7?	 131
Paratyphoid	130—			 130
Gonorrhea	126—	53+	35?	 214
Water	71—	63+	1?	 135
Miscellaneous				 401
				3,040

TABLE XXVI

July, 1920 to July, 1922				
Diphtheria	1,598—	174+	2 Us.	1,774
Sputum	1,275—	376+	1ND	1.652
Typhoid	156—	46+	7?	209
Paratyphoid	208—			208
Gonorrhea	251—	124+	79?	454
Water	118—	108+	10?	236
Miscellaneous				719
				5,252

REPORT OF THE SUPERIOR LABORATORY

July, 1920 to July, 1922

TABLE XXVII

July, 1920					
Diphtheria	27—	2+	6ND	.....	35
Sputum	12—	6+		.....	18
Typhoid	2—			.....	2
Paratyphoid	1—			.....	1
Water		3+		.....	3
Gonorrhea	26—	6+	2?	.....	34
Miscellaneous				.....	115
					208

August, 1920					
Diphtheria	31—	7+		.....	38
Sputum	30—	1+		.....	31
Typhoid	2—		1?	.....	3
Paratyphoid	2—			.....	2
Water	2—			.....	2
Gonorrhea	9—	22+	6?	.....	37
Miscellaneous				.....	101
					214

September, 1920					
Diphtheria	22—	9+	1ND	.....	32
Sputum	12—	2+		.....	14
Typhoid	2—		3?	.....	5
Gonorrhea	3—	15+	3?	.....	21
Miscellaneous				.....	96
					164

October, 1920					
Diphtheria	43—	19+		.....	62
Sputum	4—	10+		.....	14
Typhoid	1—	2+		.....	3
Gonorrhea	6—	17+	8?	.....	31
Miscellaneous				.....	108
					218

November, 1920					
Diphtheria	69—	30+		.....	99
Sputum	21—	6+		.....	27
Typhoid	1—			.....	1
Gonorrhea	12—	24+	8?	.....	44
Miscellaneous				.....	110
					281

December, 1920					
Diphtheria	60—	30+		.....	90
Sputum	36—	2+		.....	38
Typhoid	2—			.....	2
Gonorrhea	10—	22+	5?	.....	37
Miscellaneous				.....	131
					298

January, 1921				
Diphtheria	62—	23+		85
Sputum	30—	9+		39
Typhoid	2—		3?	5
Gonorrhea	3—	10+	9?	22
Miscellaneous				177
				328
February, 1921				
Diphtheria	88—	20+		108
Sputum	39—	1+		40
Typhoid	2—	2+	2?	6
Water		5+		5
Gonorrhea	7—	13+	8?	28
Miscellaneous				286
				473
March, 1921				
Diphtheria	39—	8+		47
Sputum	29—	2+		31
Typhoid	2—	8+	2?	12
Gonorrhea	5—	18+	3?	26
Water	6—			6
Miscellaneous				312
				434
April, 1921				
Diphtheria	44—	5+		49
Sputum	27—	5+		32
Gonorrhea	7—	17+	5?	29
Typhoid	7—	2+		9
Miscellaneous				360
				479
May, 1921				
Diphtheria	60—	11+		71
Sputum	14—	4+		18
Typhoid	5—			5
Gonorrhea	8—	12+	4?	24
Miscellaneous				215
				333
June, 1921				
Diphtheria	28—	3+		31
Sputum	33—	4+		37
Typhoid	4—	2+		6
Gonorrhea	5—	16+	7?	28
Miscellaneous				214
				316

TABLE XXVIII

July, 1921				
Diphtheria	24—	3+		27
Sputum	10—	1+		11
Typhoid	2—	1+		3
Gonorrhea	11—	9+	5?	25
Miscellaneous				137
				203
August, 1921				
Diphtheria	19—			19
Sputum	27—	2+		29
Typhoid	3—	2+		5
Gonorrhea	11—	11+	11?	33
Miscellaneous				170
				256
September, 1921				
Diphtheria	19—	5+		24
Sputum	25—	5+		30
Typhoid	3—	2+		5
Gonorrhea	23—	11+	13?	47
Miscellaneous				209
				315
October, 1921				
Diphtheria	66—	18+		84
Sputum	29—	8+		37
Gonorrhea	20—	14+	17?	51
Typhoid	3—			3
Miscellaneous				198
				373
November, 1921				
Diphtheria	82—	14+		96
Sputum	34—	5+		39
Gonorrhea	18—	10+	7?	35
Typhoid		1+		1
Miscellaneous				187
				358
December, 1921				
Diphtheria	71—	14+		85
Sputum	19—	5+		24
Gonorrhea	26—	17+	7?	50
Typhoid		3+		3
Miscellaneous				131
				293
January, 1922				
Diphtheria	17+	95—		112
Sputum	3+	20—		23
Typhoid	2+	3—		5
Gonorrhea	12+	13—	5?	30
Miscellaneous				257
				427
February, 1922				
Diphtheria	20+	98—		118
Sputum	3+	28—		31
Typhoid	1+	4—		5
Gonorrhea	6+	18—	10?	34
Miscellaneous				217
				405
March, 1922				
Diphtheria	16+	75—		91
Sputum	8+	37—		45
Typhoid	2+	4—		6
Gonorrhea	7+	21—	7?	35
Miscellaneous				209
				386
April, 1922				
Diphtheria	8+	55—		63
Sputum	3+	29—		32
Typhoid	1+	3—		4
Gonorrhea	15+	13—	2?	30
Miscellaneous				335
				464

May, 1922				
Diphtheria	2+	28—		30
Sputum	6+	30—		36
Typhoid	11+	4—		15
Gonorrhea	9+	17—	7?	33
Miscellaneous				271
				385

June, 1922				
Diphtheria	10—			10
Sputum	30—	2+		32
Typhoid	2—	3+		5
Gonorrhea	14—	6+	11?	31
Miscellaneous				195
				273

TABLE XXIX

July, 1920 to July, 1921				
Diphtheria	573—	167+	7ND	747
Sputum	287—	52+		339
Typhoid	32—	16+	11?	59
Paratyphoid	3—			3
Water	8—	8+		16
Gonorrhea	101—	192+	68?	361
Miscellaneous				2,221
				3.746

TABLE XXX

July, 1921 to July, 1922				
Diphtheria	642—	117+		759
Sputum	318—	51+		369
Typhoid	31—	29+		60
Gonorrhea	205—	127+	102?	434
Miscellaneous				2,516
				4,138

TABLE XXXI

July, 1920 to July, 1922				
Diphtheria	1,215—	284+	7ND	1,506
Sputum	605—	103+		708
Typhoid	63—	45+	11?	119
Paratyphoid	3—			3
Gonorrhea	306—	319+	170?	795
Water	8—	8+		16
Miscellaneous				4,737
				7.384

REPORT OF THE WAUSAU LABORATORY

July, 1920 to July, 1922

TABLE XXXII

July, 1920			
Diphtheria	19—	4+	23
Sputum	27—	20+	47
Typhoid	3—		3
Paratyphoid	2—		2
Water	1—		1
Gonorrhea	4—	7+	11
Miscellaneous			6
			93

August, 1920			
Diphtheria	14—	2+	16
Sputum	31—	15+	46
Typhoid	2—		2
Paratyphoid	2—		2
Water	1—		1
Gonorrhea	6—	7+	13
Miscellaneous			16
			96

September, 1920			
Diphtheria	8—	6+	14
Sputum	37—	23+	60
Gonorrhea	4—	1+	5
Miscellaneous			9
			88

October, 1920			
Diphtheria	8—		8
Sputum	55—	22+	77
Gonorrhea	6—	9+	15
Miscellaneous			9
			109

November, 1920			
Diphtheria	16—		16
Sputum	43—	23+	66
Water	4—		4
Gonorrhea	9—	4+	13
Miscellaneous			12
			111

December, 1920			
Diphtheria	22—	2+	24
Sputum	39—	22+	61
Gonorrhea	12—	5+	17
Typhoid	1—		1
Miscellaneous			11
			114

January, 1921				
Diphtheria	21—	6+		27
Sputum	62—	16+		78
Gonorrhea	6—	4+		10
Typhoid	3—			3
Miscellaneous				23
				141
February, 1921				
Diphtheria	31—	5+		36
Sputum	43—	25+		68
Typhoid		2+		2
Paratyphoid	1—	1+		2
Gonorrhea	5—	2+		7
Miscellaneous				40
				155
March, 1921				
Diphtheria	56—	8+		64
Sputum	47—	32+		79
Typhoid	4—			4
Paratyphoid	2—			2
Gonorrhea	14—	2+	1?	17
Miscellaneous				23
				189
April, 1921				
Diphtheria	34—	10+		44
Sputum	36—	38+		74
Typhoid		1+		1
Paratyphoid		1+		1
Gonorrhea	8—	8+		16
Miscellaneous				13
				149
May, 1921				
Diphtheria	58—	20+	1?	79
Sputum	47—	39+		86
Water		1+		1
Typhoid	2—			2
Gonorrhea	10—	5+		15
Miscellaneous				13
				196
June, 1921				
Diphtheria	45—	4+		49
Sputum	39—	38+		77
Typhoid	8—	1+		9
Water	1—			1
Gonorrhea	8—	5+		13
Miscellaneous				11
				160

TABLE XXXIII

July, 1921				
Diphtheria	17—	4+		21
Sputum	36—	28+		64
Typhoid	3—	1+		4
Gonorrhea	6—	5+		11
Miscellaneous				7
				107
August, 1921				
Diphtheria	14—	14+		28
Sputum	29—	31+		60
Typhoid	3—	2+		5
Gonorrhea	3—	7+		10
Water	7—		1?	8
Miscellaneous				4
				115
September, 1921				
Diphtheria	117—	31+		148
Sputum	38—	39+		77
Typhoid	4—			4
Gonorrhea	11—	3+		14
Water	5—			5
Miscellaneous				8
				256
October, 1921				
Diphtheria	405—	167+		572
Sputum	27—	32+		59
Typhoid	4—	5+		9
Gonorrhea	8—	1+		9
Miscellaneous				5
				654
November, 1921				
Diphtheria	243—	82+	1?	326
Sputum	32—	27+		59
Typhoid	1—			1
Gonorrhea	7—	2+		9
Water	1—			1
Miscellaneous				7
				403
December, 1921				
Diphtheria	174—	71+		245
Sputum	24—	32+		56
Typhoid	1—			1
Water	1—		1?	2
Gonorrhea	3—	3+		6
Miscellaneous				6
				316
January, 1922				
Diphtheria	171—	50+		221
Sputum	35—	25+		60
Water	1—			1
Gonorrhea	9—	3+		12
Miscellaneous				10
				304
February, 1922				
Diphtheria	79—	10+		89
Sputum	63—	30+		93
Gonorrhea	4—	5+		9
Water	3—	2+		5
Miscellaneous				8
				204
March, 1922				
Diphtheria	63—	13+		76
Sputum	48—	34+		82
Gonorrhea	7—	4+		11
Water	4—			4
Miscellaneous				5
				178
April, 1922				
Diphtheria	38—	9+		47
Sputum	66—	28+		94
Typhoid	1—			1
Gonorrhea	7—	2+		9
Water	1—			1
Miscellaneous				2
				154

May, 1922					
Diphtheria	41—			.....	41
Sputum	52—	30+		.....	82
Typhoid	2—	1+		.....	3
Gonorrhea	5—	5+		.....	10
Water	1—			.....	1
Miscellaneous				.....	8
					145

June, 1922					
Diphtheria	28—	10+	1?	.....	39
Sputum	60—	24+		.....	84
Typhoid	2—			.....	2
Water		2+	1?	.....	3
Gonorrhea	5—	3+		.....	8
Miscellaneous				.....	2
					138

TABLE XXXIV

July, 1920 to July, 1921					
Diphtheria	332—	67+	1?	.....	400
Sputum	506—	313+		.....	819
Typhoid	23—	4+		.....	27
Paratyphoid	7—	2+		.....	9
Gonorrhea	92—	59+	1?	.....	152
Water	7—	1+		.....	8
Miscellaneous				.....	186
					1,601

TABLE XXXV

July, 1921 to July, 1922					
Diphtheria	1,390—	458+	5?	.....	1,853
Sputum	510—	360+		.....	870
Typhoid	21—	9+		.....	30
Gonorrhea	75—	43+		.....	118
Water	24—	4+	3?	.....	31
Miscellaneous				.....	72
					2,974

TABLE XXXVI

July, 1920 to July, 1922					
Diphtheria	1,722—	525+	6?	.....	2,253
Sputum	1,016—	673+		.....	1,689
Typhoid	44—	13+		.....	57
Paratyphoid	7—	2+		.....	9
Water	31—	5+	3?	.....	39
Gonorrhea	167—	102+	1?	.....	270
Miscellaneous				.....	258
					4,575

REPORT OF CENTRAL AND BRANCH LABORATORIES

July, 1920 to July, 1921

Diphtheria	17,124—	1,086C.	524NG	2,764+	80?	4 Us	26ND	.....	21,608
Sputum	4,935—	1,701+	22 Us	12ND				.....	6,670
Typhoid	1,000—	196+	72?	10 Us.	1ND			.....	1,279
Paratyphoid	1,159—	10+	1?	1ND.				.....	1,171
Rabies	23—	28+						.....	51
Water	1,652—	22C.	937+	76 Chem.	14?	4 Us.	346 Spec.	.....	3,051
Gonorrhea	1,681—	2ND	1,074+	405?	27 Us	19 Ob.		.....	3,208
Miscellaneous								.....	6,096
Not examined								.....	373
									43,507

Report of Central and Branch Laboratories

July, 1921 to July, 1922

July, 1921 to July, 1922									
Diphtheria	31,731—	5,239+	148?	517NG	3 Us.	1212C.		.....	38,850
Sputum	6,267—	2,095+	1?	8ND	29 Us.			.....	8,400
Typhoid	1,121—	321+	128?	2 Us.				.....	1,572
Paratyphoid	1,369—	1+	3?	2 Us.				.....	1,375
Gonorrhea	2,251—	1,261+	473?	65 Us.	1 Ob.			.....	4,051
Water	2,003—	1,721+	2ND	44 Spec.	30?	95 Chem.	20 Us.	.....	3,915
Rabies	23—	4+	1 Us.					.....	28
Miscellaneous								.....	7,297
Not examined								.....	424
									65,912

Report of Central and Branch Laboratories

July, 1920 to July, 1922

July, 1920 to July, 192?									
Diphtheria	48,855—	8,003+	2,298C.	1,041NG	228?	7 Us.	26ND	.....	60,458
Sputum	11,202—	3,796+	51 Us.	1?	20ND			.....	15,070
Typhoid	2,121—	517+	200?	12 Us.	1ND			.....	2,851
Paratyphoid	2,528—	11+	4?	1ND	2 Us			.....	2,546
Rabies	46—	32+	1 Us.					.....	79
Water 390 Sp.	3,655—	2,658+	22C.	171 Chem.	44?	24 Us.	2ND	.....	6,966
Gonorrhea	3,932—	2,335+	878?	92 Us.	20 Ob.	2ND		.....	7,259
Miscellaneous								.....	13,393
Not examined								.....	797
									109,419

Following are the signs used in this report:

+	Positive
—	Negative
?	Suspicious
C.	Contaminated
Uns.	Unsatisfactory
NG	No growth
ND	No diagnosis
Ob.	Observation
Chem.	Chemcial
Spec.	Special

REPORT

OF THE

Bureau of Vital Statistics

OF THE

State of Wisconsin

FOR THE PERIOD

From January 1, 1920, to December 31, 1921.

LETTER OF TRANSMITTAL

OFFICE OF THE

STATE BOARD OF HEALTH AND BUREAU OF VITAL STATISTICS

Madison, Wis., January, 1923.

To His Excellency, John J. Blaine,
Governor of the State of Wisconsin.

Sir: In compliance with the requirements of the law, I have the honor to submit to you a detailed abstract of the Births, Deaths and Marriages that were registered in Wisconsin from January 1, 1920, to December 31, 1921. The report of Divorces covers the period from October 1, 1919, to September 30, 1921.

Very respectfully yours,
C. A. Harper,
State Registrar of Vital Statistics.

GENERAL SUMMARY

A SUMMARIZED STATEMENT OF BIRTHS, DEATHS, MARRIAGES AND DIVORCES

Reported by the local registrars of the various townships, incorporated villages and cities from January 1, 1920, to December 31, 1921, and divorce statistics reported by the clerks of the courts having jurisdiction in divorce actions for the period from October 1, 1919, to September 30, 1921.

BIRTHS REPORTED DURING CALENDAR YEAR OF 1920

Sex:	
Males	30,564
Females	28,628
Sex not stated	77
Total births reported, excluding stillbirths	59,269
Total births reported, including stillbirths	60,892
Annual birth rate per one thousand estimated population	22.5
Parentage:	
Both parents native born	43,691
Father native and mother foreign	2,691
Mother native and father foreign	4,631
Both parents foreign born	7,553
Birthplace of one or both parents unknown	703
Total	59,269
Stillbirths:	
Males	899
Females	681
Sex not stated	43
Total	1,623
Twin Births:	
Males	543
Females	507
Sex not stated	0
Total	1,050
Illegitimate Births:	
Males	457
Females	430
Sex not stated	7
Total	894
Triplets:	
Males	8
Females	4
Total	12

BIRTHS REPORTED DURING CALENDAR YEAR OF 1921

Sex:	
Males	31,666
Females	30,424
Sex not stated	73
Total births reported, excluding stillbirths	62,163
Total births reported, including stillbirths	63,826
Annual birth rate per one thousand estimated population	23.3
Parentage:	
Both parents native born	46,402
Father native and mother foreign	2,181
Mother native and father foreign	5,354
Both parents foreign born	7,391
Birthplace of one or both parents unknown	835
Total	62,163
Stillbirths:	
Males	910
Females	698
Sex not stated	55
Total	1,663
Twin Births:	
Males	462
Females	459
Sex not stated	3
Total	924
Illegtimate Births:	
Males	507
Females	467
Sex not stated	5
Total	979
Triplets:	
Males	5
Females	10
Sex not stated	3
Total	15

DEATHS REPORTED DURING CALENDAR YEAR OF 1920

(Exclusive of Stillbirths)

Sex:	
Males	16,016
Females	13,840
Sex not stated	3
Total	29,859
Male excess	2,176
Annual death rate per thousand estimated population	11.3
Total stillbirths reported as deaths	1,673

Color:	
White	29,593
Black	75
Indian	191
Color not stated	0
Total	29,859
Conjugal Condition:	
Single	11,798
Married	11,674
Widowed	6,021
Divorced	271
Unknown	95
Total	29,859

DEATHS REPORTED DURING CALENDAR YEAR OF 1921

(Exclusive of Stillbirths)

Sex:	
Males	14,924
Females	12,746
Sex not stated	4
Total	27,674
Male excess	2,178
Annual death rate per thousand estimated population	10.3
Total stillbirths reported as deaths	1,813
Color:	
White	27,464
Black	55
Indian	155
Color not stated	0
Total	27,674
Conjugal Condition:	
Single	10,530
Married	10,787
Widowed	5,999
Divorced	257
Unknown	101
Total	27,674

MARRIAGES REPORTED DURING CALENDAR YEAR OF 1920

Both parties native born	18,506
Groom native, bride foreign	689
Groom foreign, bride native	1,738
Both parties foreign born	1,313
Birthplace of one or both unknown	47
Total	22,293
Annual marriage rate per one thousand estimated population	16.9

MARRIAGES BY AGE GROUPS

Brides:	
Under fifteen years	1
15 to 19 years	4,780
20 to 24 years	9,845
25 to 29 years	4,434
30 to 34 years	1,506
35 to 39 years	683
40 to 44 years	390
45 to 49 years	277
50 to 54 years	147
55 to 59 years	100
60 to 79 years	106
80 years of age and over	0
Age not stated	24
Total	22,293
Grooms:	
15 to 19 years	452
20 to 24 years	8,469
25 to 29 years	7,583
30 to 34 years	2,894
35 to 39 years	1,278
40 to 44 years	607
45 to 49 years	412
50 to 54 years	263
55 to 59 years	181
60 to 79 years	124
80 years of age or over	2
Age not stated	28
Total	22,293

MARRIAGES REPORTED DURING CALENDAR YEAR OF 1921

Both parties native born	15,345
Groom native, bride foreign	605
Bride native, groom foreign	1,349
Both parties foreign born	1,419
Birthplace of one or both unknown	41
Total	18,759
Annual marriage rate per one thousand estimated population	14.1

MARRIAGE BY AGE GROUPS

Brides:	
Under 15 years	0
15 to 19 years	4,104
20 to 24 years	8,062
25 to 29 years	3,591
30 to 34 years	1,291
35 to 39 years	644
40 to 44 years	368
45 to 49 years	276
50 to 54 years	190
55 to 59 years	107
60 to 70 years	111
80 years of age or over	0
Age not stated	15
Total	18,759

Grooms:

15 to 19 years	429
20 to 24 years	6,497
25 to 29 years	6,443
30 to 34 years	2,563
35 to 39 years	1,155
40 to 44 years	586
45 to 49 years	363
50 to 54 years	269
55 to 59 years	179
60 to 79 years	255
80 years of age or over	5
Age not stated	15
Total	18,759

DIVORCES

Total divorces from Oct. 1, 1919, to Sept. 30, 1920	2,425
Annual divorce rate per one thousand marriages	108.7
Divorces granted to husband	681
Divorces granted to wife	1,744
By Causes:	
Adultery	105
Cruelty	1,079
Desertion	701
Drunkenness	42
Neglect to provide	347

DIVORCES

Total divorces from Oct. 1, 1920, to Sept. 30, 1921	2,112
Annual divorce rate per one thousand marriages	112.5
Divorces granted to husband	598
Divorces granted to wife	1,514
By Causes:	
Adultery	75
Cruelty	986
Desertion	610
Drunkenness	29
Neglect to provide	287

TABLE I—DEATHS RECORDED FROM CERTAIN DISEASES AND CAUSES BY CALENDAR YEARS SINCE 1913

Name of Disease	1914	1915	1916	1917	1918	1919	1920	1921
Typhoid Fever	176	123	202	137	102	82	70	78
Smallpox	5	6	1	2	13	5	9	15
Measles	150	47	289	63	155	66	221	41
Scarlet Fever	215	85	125	245	198	152	252	240
Whooping Cough	155	186	167	195	189	118	295	165
Diphtheria	341	328	221	347	271	293	379	399
Influenza	227	490	502	349	7,166	2,230	2,107	206
Erysipelas	93	64	109	116	73	53	87	96
Tuberculosis	2,435	2,310	2,302	2,460	2,413	2,191	2,243	2,017
Cancer	1,788	1,781	1,982	2,086	2,091	2,286	2,325	2,605
Meningitis	209	197	213	176	259	153	151	123
Apoplexy	1,469	1,624	1,817	1,799	1,888	1,952	1,949	2,033
Heart Disease	2,577	2,715	2,988	3,193	2,982	2,900	3,124	3,372
Pneumonia	2,239	2,391	2,878	3,182	3,508	2,487	2,901	2,093
Diarrhea (under 2 years)	889	646	855	684	716	675	647	763
Brights Disease	1,197	1,258	1,354	1,552	1,398	1,434	1,422	1,429
Puerperal Septicemia	118	113	143	126	108	84	122	120
Congenital Debility	1,727	1,539	1,812	1,539	1,609	1,415	1,498	1,771
Old Age	1,307	1,315	1,283	1,032	774	842	871	851
Suicide	367	328	353	348	328	311	265	355
Accidental deaths	1,624	1,426	1,604	1,498	1,319	1,258	1,267	1,368
Homicide	64	54	43	77	44	48	41	57

TABLE II—SHOWING TOTAL BIRTHS, DEATHS, MARRIAGES AND DIVORCES REPORTED DURING THE CALENDAR YEAR OF 1920

County	Estimated Population for 1921	Births		Still-births Reported as Births	Deaths		Marriages		Divorces Oct. 1, 1920 to Sept. 30, 1921
		Total Exclusive of Still-births	Rate per 1,000		Total Exclusive of Still-births	Rate per 1,000	Total Marriages	Rate per 1,000	
Adams	9,287	204	22.0	10	75	8.1	50	10.8	6
Ashland	24,538	596	24.2	18	330	13.4	162	13.2	.....
Barron	34,281	834	24.3	13	345	10.1	278	16.2	17
Bayfield	17,104	315	18.3	8	126	7.3	68	7.9	10
Brown	61,889	1,559	25.1	48	849	13.7	593	19.2	76
Buffalo	15,615	351	22.5	8	132	8.5	108	13.8	5
Burnett	10,725	242	20.6	3	90	8.4	33	6.1	4
Calumet	17,228	363	21.1	11	147	8.5	122	14.2	2
Chippewa	36,482	715	19.6	20	478	13.1	251	13.8	18
Clarke	35,173	874	24.8	22	270	7.7	275	15.4	26
Columbia	30,468	568	18.6	14	328	10.7	244	16.0	16
Crawford	16,772	378	22.5	7	164	9.8	134	15.9	11
Dane	89,432	1,865	20.9	26	1,041	11.8	726	16.2	75
Dodge	49,742	982	19.7	39	464	9.3	412	16.5	32
Door	19,073	450	23.6	11	163	8.5	152	15.9	9
Douglas	49,724	1,122	22.6	44	524	10.5	254	10.2	74
Dunn	26,970	611	22.6	23	275	10.2	217	16.1	11
Eau Claire	35,745	921	25.8	19	522	14.6	338	18.9	22
Florence	3,602	54	15.0	.....	27	7.5	17	9.4	3
Fond du Lac	56,119	1,270	22.6	23	694	12.3	488	17.4	48
Forest	9,850	244	24.8	7	69	7.2	44	8.9	10
Grant	39,044	849	21.7	20	432	11.0	291	14.9	23
Green	21,568	450	20.8	6	248	11.5	182	16.9	11
Green Lake	14,875	252	16.9	5	152	11.3	130	17.5	4
Iowa	21,504	401	18.7	8	243	11.3	133	12.3	3
Iron	10,261	206	20.0	5	88	8.5	65	12.6	.....
Jackson	17,746	370	20.9	8	189	10.6	80	9.0	7
Jefferson	35,022	625	17.8	18	375	10.7	309	17.6	20
Juneau	19,209	395	20.5	9	176	9.2	135	14.0	5
Kenosha	51,284	1,265	24.6	44	531	10.3	445	17.3	94
Kewaunee	16,091	343	21.3	7	166	10.3	129	16.1	.....
La Crosse	44,297	1,053	23.8	29	616	13.9	351	15.8	45
Lafayette	20,002	404	20.2	9	184	9.2	157	15.7	16
Langlade	21,471	601	28.0	10	184	8.6	205	19.1	22
Lincoln	20,987	462	22.0	11	193	9.2	190	18.1	15
Manitowoc	51,644	1,237	24.0	43	597	11.6	473	18.2	31
Marathon	65,259	1,766	27.0	41	639	9.7	595	18.2	42
Marinette	34,477	774	22.4	22	350	10.1	164	9.5	25
Marquette	10,443	190	18.3	8	72	6.9	111	21.3	4
Milwaukee	538,469	12,081	22.4	349	7,056	13.1	5,872	21.8	713
Monroe	28,666	706	24.6	25	291	10.1	196	13.6	16
Oconto	27,104	641	23.7	25	257	9.5	126	9.3	14
Oneida	13,996	352	23.8	11	133	9.5	119	17.0	.....
Outagamie	55,113	1,318	23.9	38	622	11.2	467	16.9	51
Ozaukee	16,335	336	20.6	14	204	12.5	94	11.5	4
Pepin	7,481	153	20.4	.....	73	9.8	42	11.2	3
Pierce	21,663	449	20.7	11	187	8.6	140	12.9	15
Polk	26,870	675	25.1	20	237	8.8	89	6.6	7
Portage	33,649	880	26.2	20	384	11.4	290	17.2	27
Price	18,517	421	22.8	9	119	6.4	121	13.1	9
Racine	79,011	1,830	23.2	59	949	12.0	689	17.4	136
Richland	19,823	540	27.2	10	184	9.3	166	16.7	18
Rock	66,150	1,353	20.4	42	906	13.7	479	14.4	132
Rusk	16,403	416	25.4	9	143	8.6	119	14.5	11
St. Croix	26,106	599	22.9	13	274	10.5	213	16.3	10

TABLE NO. II—Continued

County	Population U. S. Census for 1920	Births		Still births Reported as Births	Deaths		Marriages		Divorces Oct 1, 1919, to Sept. 30, 1920
		Total exclusive of Still-births	Rate per 1,000		Total exclusive of Still-births	Rate per 1,000	Total Marriages	Rate per 1,000	
Sauk	32,512	674	20.7	20	380	11.7	310	19.0	20
Sawyer	8.243	206	25.0	10	67	8.1	39	9.5	4
Shawano	33,975	907	26.8	40	356	10.5	288	17.0	59
Sheboygan	59,913	1,333	22.3	38	636	10.6	539	18.2	11
Taylor	18,045	491	27.3	9	131	7.3	125	13.9	5
Trempealeau	24,500	552	22.5	5	266	10.8	173	14.1	8
Vernon	29,252	656	22.4	19	279	9.5	215	14.7	32
Vilas	5,649	135	23.9	2	62	11.0	27	9.6	2
Walworth	29.327	444	15.2	10	354	12.0	220	15.0	23
Washburn	11,377	266	23.4	3	76	6.7	64	11.2	12
Washington	25,713	554	21.6	8	287	11.1	230	17.9	8
Waukesha	42,612	828	19.4	29	579	13.5	326	15.3	48
Waupaca	34,200	763	22 3	25	399	11.7	336	19.6	24
Waushara	16,712	336	20.2	13	151	9.0	134	16.0	6
Winnebago	63,847	1,302	20.4	38	881	13.8	609	19.1	86
Wood	34,643	911	26.3	22	388	11.2	325	18.8	69
Total	2,631,079	59,269	22.5	1,623	29,859	11.3	22,293	16.9	2,425

TABLE III—SHOWING TOTAL BIRTHS, DEATHS, MARRIAGES AND DIVORCES REPORTED DURING THE CALENDAR YEAR OF 1921

County	Estimated Population for 1921	Births		Still-births Reported as Births	Deaths		Marriages		Divorces Oct. 1, 1920 to Sept. 30, 1921
		Total Exclusive of Still-births	Rate per 1,000		Total Exclusive of Still-births	Rate per 1,000	Total Marriages	Rate per 1,000	
Adams	9,355	182	19.4	4	69	7.4	40	8.5	5
Ashland	24,795	598	23.7	21	292	11.8	119	9.6	.....
Barron	34,797	884	25.4	20	356	10.2	258	14.7	13
Bayfield	17,215	367	21.3	14	108	6.3	60	7.0	9
Brown	62,668	1,622	25.9	57	817	13.0	544	19.0	72
Buffalo	15,615	378	24.1	11	130	8.3	101	13.0	3
Burnett	10,894	238	21.8	6	94	8.6	31	5.7	2
Calumet	17,280	389	22.5	14	144	8.3	107	12.4	1
Chippewa	36,919	831	22.5	20	397	10.7	251	13.6	19
Clark	35,685	853	23.8	23	269	7.5	229	12.8	21
Columbia	30,468	596	19.5	8	330	10.8	200	13.1	21
Crawford	16,820	382	22.7	10	146	8.7	118	14.0	16
Dane	90,631	1,958	21.6	44	960	10.6	662	14.6	80
Dodge	49,972	1,118	22.4	44	466	9.3	306	12.3	18
Door	19,109	470	24.6	20	220	11.5	115	12.0	8
Douglas	49,954	1,127	22.6	39	494	9.9	213	8.5	93
Dunn	27,141	668	24.6	18	252	9.3	149	11.0	17
Eau Claire	36,047	985	27.3	41	434	12.0	312	17.3	18
Florence	3,624	72	19.9	3	27	7.5	13	7.2	2
Fond du Lac	56,569	1,269	22.4	48	616	10.9	431	15.2	50
Forest	10,156	275	27.1	10	73	7.2	54	10.6	5
Grant	39,047	917	23.5	31	413	10.6	234	12.0	24
Green	21,568	492	22.7	12	252	11.7	174	16.1	10
Green Lake	14,875	251	16.8	8	173	11.6	96	12.9	2
Iowa	21,504	494	23.0	16	249	11.6	104	9.7	10
Iron	10,456	228	21.8	5	79	7.5	62	11.9	4
Jackson	17,814	364	20.4	13	168	9.4	78	8.8	14
Jefferson	35,093	705	20.1	20	408	11.6	271	15.4	19
Juneau	19,209	433	22.5	14	188	9.8	130	13.5	13
Kenosha	53,119	1,270	23.9	44	428	8.1	270	10.2	83
Kewaunee	16,091	349	21.7	10	160	9.9	116	14.4	3
La Crosse	44,327	1,080	24.3	43	667	15.0	302	13.6	47
Lafayette	20,002	364	18.2	16	181	9.0	85	8.5	7
Langlade	21,911	725	33.0	25	210	9.6	172	15.7	23
Lincoln	21,179	507	23.9	13	201	9.5	171	16.1	18
Manitowoc	52,310	1,308	25.0	22	533	10.2	415	15.8	18
Marathon	66,279	1,874	28.3	65	620	9.3	466	14.0	48
Marinette	34,543	793	23.0	25	324	9.4	153	8.9	.....
Marquette	10,643	230	21.7	2	87	8.2	73	13.7	5
Milwaukee	548,997	12,665	23.1	278	5,952	10.8	4,937	18.0	630
Monroe	28,666	710	24.8	17	309	10.8	191	13.3	17
Oconto	27,248	708	26.0	13	243	8.9	116	8.5	4
Oneida	14,252	359	25.2	15	154	10.8	83	11.6	5
Outagamie	55,714	1,320	23.7	37	580	10.4	368	13.2	39
Ozaukee	16,335	342	21.0	11	167	10.2	97	11.9	5
Pepin	7,481	162	21.7	.....	77	10.3	46	12.3	3
Pierce	21,663	453	20.9	11	211	9.8	89	8.2	9
Polk	27,420	706	25.7	27	215	7.9	96	7.0	5
Portage	33,919	932	27.5	21	372	10.9	252	14.8	39
Price	18,989	479	25.2	13	149	7.9	121	12.7	3
Racine	81,169	1,762	21.7	48	804	9.9	466	11.5	96
Richland	19,924	537	27.0	11	223	11.2	151	15.2	18
Rock	67,211	1,370	20.4	40	678	10.1	320	9.5	94
Rusk	16,927	521	30.2	5	113	6.7	128	15.1	13
St. Croix	26,125	602	23.0	3	239	9.2	197	15.1	8

TABLE NO. III—Continued

County	Population U. S. Census for 1920	Births		Still births Reported as Births	Deaths		Marriages		Divorces Oct 1, 1919. to Sept. 30, 1920
		Total exclusive of Stillbirths	Rate per 1,000		Total exclusive of Stillbirths	Rate per 1,000	Total Marriages	Rate per 1,000	
Sauk	32,512	651	20.0	5	316	9.7	252	15.5	14
Sawyer	8,444	215	25.5	2	50	5.9	36	8.5	.....
Shawano	34,184	811	23.7	2	345	10.1	247	14.4	25
Sheboygan	60,415	1,375	22.7	27	611	10.1	468	15.5	31
Taylor	18,485	496	26.7	6	127	6.9	122	13.2	11
Trempealeau	24,657	570	23.1	12	227	9.2	176	14.3	3
Vernon	29.365	737	25.0	21	255	8.7	175	11.9	3
Vilas	5,649	149	26.4	8	70	12.4	26	9.2	4
Walworth	29,327	499	17.0	15	347	11.8	162	11.0	16
Washburn	11,695	294	25.2	18	78	6.7	57	9.7	2
Washington	25,905	565	21.8	13	284	10.9	177	13.7	7
Waukesha	43.163	932	21.6	23	586	13.5	266	12.3	46
Waupaca	34,341	757	22.0	17	432	12.5	246	14.3	32
Waushara	16,712	348	20.8	6	153	9.2	116	13.9	3
Winnebago	64.020	1,475	23.0	42	878	13.7	556	17.4	78
Wood	35,049	1,015	29.0	37	394	11.2	334	19.1	28
Total	2,661,647	62,163	23.3	1,663	27.674	10.3	18,759	14.1	2.112

BIRTHS

For the calendar year of 1920 the various town, village and city registrars reported 59,269 births, exclusive of stillbirths. This represents an annual birth rate of 22.5 per thousand gross estimated population. The birth rate by counties for 1920, as shown by Table No. 2, varies from 15.2 per thousand for Walworth county to 28 per thousand for Langlade county. The rate for all of the counties is more uniform than formerly and indicates more complete registration in practically every part of the state. A check to determine the accuracy of birth registration in all counties having a birth rate below 20 per thousand has been undertaken and if it is shown that the low rate is due to failure on the part of physicians and midwives to report births as the law requires prosecutions will be started. This is necessary in order to maintain our standing as a registration state.

For the calendar year of 1921 the local registrars reported 62,163 live births and 1,663 stillbirths. The live births reported represent a birth rate for the entire state of 23.3 per thousand population. The birth rates by counties, as shown by Table No. 3, indicate a more favorable rate than for the preceding year. Langlade county still shows the highest rate, which is 33 per thousand population and the lowest rate was for Green Lake county with a rate of 16.8 births per thousand population.

For 1920, 30,564 births of males were recorded, 28,628 females, and in 77 cases the sex of the child was unknown or not stated. During 1920, 1,623 stillbirths were reported as births; 1,050 twin births were recorded; 894 illegitimate births and 12 cases of triplets.

Classifying births for 1920 according to the nativity of the parents it is shown by Table No. 4 that 43,691 were children of native parents: In 2,691 cases the father was native and the mother foreign; 4,631 births occurred where the mother was native and the father foreign; there were 7,553 births where both parents were foreign born; in 703 cases the birthplace of one or both parents was unknown or not stated. Tables numbered 5 and 7 give a tabulation of stillbirths, twin births, triplets and illegitimate births reported by counties according to sex.

For the calendar year of 1921 Table No. 6 shows that 31,666 of the births reported were males, 30,424 were females and in 73 cases the sex was unknown or not stated. For 1921 there were recorded 1,663 stillbirths, 924 twin births, 15 cases of triplets and 979 illegitimate births.

Classifying the 1921 births according to the nativity of the parents Table No. 6 shows that in 46,402 cases both parents were native born; in 2,181 cases the father was native and the mother foreign.

in 5,354 cases the mother was native and the father foreign; in 7,391 cases both parents were foreign born and in 835 cases the birthplace of one or both parents was unknown or not stated.

For the two calendar years included in this report out of a total of 124,718 births which were recorded a physician was in attendance for 109,546 births and in only 11,886 births for the two years was the mother attended by a widwife or some person other than a physician.

The state law requires the physician or midwife in attendance to enter on the birth certificate when it is filed a statement as to whether the child was physically defective or deformed, giving the nature of the deformity or defect. For the calendar years of 1920 and 1921 the board received reports of 111 cases of defective or deformed children. The following is a tabulation showing the nature of the deformity or defect in the 111 cases reported:

Webbed fingers and toes	7	Blind in right eye	1
Club feet	18	Spina bifida	5
Cleft palate	11	Supernumerary fingers	6
Harelip and cleft palate	31	Deformed legs	1
Absence of fingers and toes	3	Undescended testicle	1
Deformed foot or hand	10	Mole on back	1
Dislocated hip	2	Enlarged thyroid	2
Harelip	11	Hypospadias	1

This information when received is reported immediately to the State Board of Control so that an investigation can be made to determine if it is possible to remedy the physical defect or deformity, and if proper treatment is being given. If the parents are poor and unable to provide proper treatment provision is made for having the children treated at the Wisconsin General Hospital free of charge. This is an economical undertaking for the state for the reason that it makes it possible for the child to grow up to be a useful, self-supporting citizen instead of being a liability on the family, the community or the state as is so often the case.

TABLE No. 4—SHOWING BIRTHS REPORTED FROM JAN. 1, 1920 TO DEC. 31, 1920, CLASSIFIED BY COUNTIES, SEX AND NATIVITY OF PARENTS

County	Total Births, Exclusive of Stillbirths	Sex			Stillbirths	Twinbirths	Triplets	Illegitimate	Parentage					Attended by		
		Male	Female	Not Stated					Both Parents Native Born	Father Native and Mother Foreign	Mother Native and Father Foreign	Both Parents Foreign Born	Birthplace of one or Both Parents Unknown	Physician	Midwife	Others
Adams	204	117	86	1	10	6	.....	3	170	6	13	13	2	179	15	10
Ashland	596	311	285	.....	18	17	.....	18	357	23	84	125	7	545	33	18
Barron	834	439	393	2	13	9	.....	11	596	40	95	97	6	775	17	42
Bayfield	315	184	130	1	8	6	.....	2	153	24	47	86	5	229	22	64
Brown	1,559	808	745	6	48	44	.....	110	1,313	37	74	46	89	1,489	33	37
Buffalo	351	184	167	.....	8	4	.....	1	316	9	19	7	.....	314	7	30
Burnett	242	134	107	1	3	2	.....	1	176	25	19	21	1	189	14	39
Calumet	363	182	179	2	11	.....	.....	1	334	10	4	14	1	361	1	1
Chippewa	715	377	337	1	20	9	.....	6	603	28	46	32	6	632	58	25
Clark	874	439	433	2	22	19	.....	8	642	34	73	115	10	750	34	90
Columbia	568	286	280	2	14	14	.....	4	438	25	51	48	6	563	2	3
Crawford	378	175	203	.....	7	4	.....	2	345	3	24	4	2	368	3	7
Dane	1,865	980	872	13	26	23	.....	20	1,408	76	160	206	15	1,839	20	6
Dodge	982	503	479	.....	39	13	.....	10	777	39	76	82	8	961	18	3
Door	450	241	209	.....	11	6	.....	1	392	31	9	15	3	378	28	44
Douglas	1,122	581	540	1	44	31	.....	17	578	66	162	303	13	975	97	50
Dunn	611	322	288	1	23	4	.....	3	518	44	18	24	7	571	18	22
Eau Claire	921	452	469	.....	19	4	.....	8	777	85	25	30	4	761	132	28
Florence	54	34	20	.....	.....	.....	.....	1	31	4	7	12	.....	35	11	8
Fond du Lac	1,270	641	629	.....	23	24	.....	14	1,074	33	66	87	10	1,265	1	4
Forest	244	109	135	.....	7	2	.....	2	198	9	15	20	2	228	10	6
Grant	849	414	432	3	20	34	.....	12	799	6	24	12	8	842	1	6
Green	450	245	205	.....	6	2	.....	2	327	17	58	45	3	443	3	4
Green Lake	252	129	122	1	5	6	.....	1	201	6	27	17	1	243	5	4
Iowa	401	196	204	1	8	16	.....	3	339	17	18	22	5	398	1	2
Iron	206	114	92	.....	5	2	.....	1	72	7	28	99	.....	164	26	16
Jackson	370	188	182	.....	8	8	.....	11	301	15	30	22	2	314	25	31
Jefferson	625	332	292	1	18	17	.....	9	531	17	48	26	3	620	5	.....
Juneau	395	219	176	.....	9	16	.....	2	326	10	26	32	1	368	12	15
Kenosha	1,265	675	590	1	44	16	.....	11	629	48	132	450	6	1,053	208	4

Kewaunee	343	184	159	.....	7	6	.....	4	324	4	9	2	4	338	2	3
La Crosse	1,053	569	484	.....	29	20	3	32	903	33	69	31	17	1,030	19	4
Lafayette	404	198	203	3	9	10	.....	2	352	12	20	17	3	403	.....	1
Langlade	601	280	319	2	10	11	.....	6	485	22	47	38	9	529	44	28
Lincoln	462	238	223	1	11	18	.....	5	316	19	65	55	7	406	12	44
Manitowoc	1,237	629	604	4	43	30	3	4	1,111	23	51	43	9	1,215	19	3
Marathon	1,766	906	860	.....	41	56	.....	11	1,353	61	163	173	16	1,494	145	127
Marinette	774	385	389	.....	22	4	.....	3	525	98	37	110	4	648	78	48
Marquette	190	108	82	.....	8	2	.....	3	174	5	1	7	3	172	4	14
Milwaukee	12,081	6,220	5,858	3	349	223	6	337	6,985	530	1,313	3,012	241	9,850	2,194	37
Monroe	706	354	351	1	25	8	.....	8	642	34	14	9	7	679	6	21
Oconto	641	341	300	.....	25	15	.....	5	457	32	66	81	5	564	36	41
Oneida	352	174	178	.....	11	2	.....	7	250	15	44	40	3	319	12	21
Outagamie	1,318	661	657	.....	38	18	.....	13	1,088	48	81	88	13	1,189	109	20
Ozaukee	336	153	183	.....	14	6	.....	1	298	7	12	19	.....	336	.....	.....
Pepin	153	71	79	3	.....	2	.....	1	140	3	8	1	1	141	4	8
Pierce	449	236	212	1	11	6	.....	1	397	25	11	13	3	430	5	14
Polk	675	336	338	1	20	10	.....	3	504	78	36	52	5	625	10	40
Portage	880	470	410	.....	20	12	.....	9	731	76	20	45	8	710	113	57
Price	421	217	204	.....	9	2	.....	4	228	63	28	97	5	344	35	42
Racine	1,830	898	931	1	59	27	.....	7	1,080	79	179	479	13	1,403	419	8
Richland	540	290	247	3	10	6	.....	2	511	17	5	3	4	527	7	6
Rock	1,353	681	671	1	42	19	.....	12	1,063	38	130	115	7	1,351	1	1
Rusk	416	212	204	.....	9	6	.....	1	277	50	15	72	2	333	10	73
St. Croix	599	321	277	1	13	4	.....	8	489	60	22	25	3	593	2	4
Sauk	674	365	309	.....	20	17	.....	4	599	20	38	12	5	670	.....	4
Sawyer	206	107	98	1	10	8	.....	2	148	17	4	33	4	172	11	23
Shawano	907	471	434	2	40	16	.....	9	781	29	65	23	9	836	19	52
Sheboygan	1,333	682	650	1	38	27	.....	13	927	35	123	232	16	1,261	72	.....
Taylor	491	251	240	.....	9	12	.....	4	274	21	68	126	2	370	64	57
Trempealeau	552	282	270	.....	5	2	.....	2	474	22	46	9	1	504	10	38
Vernon	656	343	309	4	19	8	.....	3	581	26	35	12	2	596	42	18
Vilas	135	71	64	.....	2	.....	.....	3	93	2	12	26	2	121	5	9
Walworth	444	232	212	.....	10	12	.....	1	360	38	15	30	1	444	.....	.....
Washburn	266	151	115	.....	3	2	.....	.....	211	27	10	17	1	237	10	19
Washington	554	282	270	2	8	4	.....	4	515	13	5	16	5	551	2	1
Waukesha	828	454	373	1	29	14	.....	21	667	63	27	60	11	819	6	3
Waupaca	763	394	369	.....	25	16	.....	8	637	29	58	36	3	704	32	27
Waushara	336	181	154	1	13	10	.....	2	283	7	24	20	2	323	1	12
Winnebago	1,302	670	631	1	38	13	.....	19	1,027	77	100	90	8	1,186	114	2
Wood	911	485	426	.....	22	8	.....	15	710	39	77	72	13	867	11	33
Total	59,269	30,564	28,628	77	1,623	1,050	12	894	43,691	2,691	4,631	7,553	703	53,142	4,545	1,582

TABLE No. 5—SHOWING STILLBIRTHS, TWIN BIRTHS AND ILLEGITIMATE BIRTHS REPORTED FROM JAN. 1, 1920 TO DEC. 31, 1920, CLASSIFIED BY COUNTIES AND SEX

	Stillbirths				Twin Births				Illegitimate Births				Triplets			
	Total	Male	Female	Not Stated	Total	Male	Female	Not Stated	Total	Male	Female	Not Stated	Total	Male	Female	Not Stated
Adams	10	6	4		6	3	3		3	3						
Ashland	18	7	11		17	8	9		18	9	9					
Barron	13	7	6		9	6	3		11	3	7	1				
Bayfield	8	5	3		6	5	1		2	1	1					
Brown	48	29	18	1	44	26	18		110	56	54					
Buffalo	8	6	2		4	3	1		1	1						
Burnett	3	3			2		2		1	1						
Calumet	11	6	5						1		1					
Chippewa	20	12	5	3	9	6	3		6	3	2	1				
Clark	22	13	9		19	12	7		8	5	3					
Columbia	14	9	4	1	14	7	7		4	2	2					
Crawford	7	4	3		4	1	3		2	1	1					
Dane	26	18	6	2	23	12	11		20	11	8	1				
Dodge	39	22	17		13	6	7		10	4	6					
Door	11	5	6		6	4	2		1		1					
Douglas	44	22	22		31	16	15		17	9	8					
Dunn	23	5	16	2	4	3	1		3	2	1					
Eau Claire	19	9	9	1	4	3	1		8	2	6					
Florence									1	1						
Fond du Lac	23	10	9	4	24	12	12		14	6	8					
Forest	7	2	5		2	2			2	1	1					
Grant	20	12	6	2	34	17	17		12	4	8					
Green	6	4	1	1	2	1	1		2	1	1					
Green Lake	5	1	4		6		6		1	1						
Iowa	8	4	4		16	5	11		3	2	1					
Iron	5	3	2		2	2			1		1					
Jackson	8	4	4		8	6	2		11	5	6					
Jefferson	18	9	9		17	8	9		9	3	6					
Juneau	9	4	5		16	9	7		2	1	1					
Kenosha	44	23	19	1	16	6	10		11	5	6					

Kewaunee	7	4	3	.....	6	3	3	.....	4	2	2	.....	.....	.....	.....	.....
La Crosse	29	14	15	.....	20	13	7	.....	32	20	12	.....	3	.....	3	.....
Lafayette	9	6	3	.....	10	5	5	.....	2	2	.....	.....	.....	.....	.....	.....
Langlade	10	4	6	.....	11	7	4	.....	6	2	4	.....	.....	.....	.....	.....
Lincoln	11	6	4	1	18	8	10	.....	5	4	1	.....	.....	.....	.....	.....
Manitowoc	43	22	21	.....	30	16	14	.....	4	1	2	1	3	2	1	.....
Marathon	41	19	21	1	56	29	27	.....	11	7	4	.....	.....	.....	.....	.....
Marinette	22	9	11	2	4	2	2	.....	3	.....	3	.....	.....	.....	.....	.....
Marquette	8	6	2	.....	2	.....	2	.....	3	.....	3	.....	.....	.....	.....	.....
Milwaukee	349	217	130	2	223	113	110	.....	337	183	154	.....	6	6	.....	.....
Monroe	25	10	15	.....	8	3	5	.....	8	3	5	.....	.....	.....	.....	.....
Oconto	25	17	8	.....	15	10	5	.....	5	4	1	.....	.....	.....	.....	.....
Oneida	11	4	7	.....	2	1	1	.....	7	4	3	.....	.....	.....	.....	.....
Outagamie	38	25	11	2	18	7	11	.....	13	5	8	.....	.....	.....	.....	.....
Ozaukee	14	8	5	1	6	2	4	.....	1	1	.....	.....	.....	.....	.....	.....
Pepin	.....	.....	.....	.....	2	2	.....	.....	1	1	.....	.....	.....	.....	.....	.....
Pierce	11	5	4	2	6	4	2	.....	1	1	.....	.....	.....	.....	.....	.....
Polk	20	12	7	1	10	3	7	.....	3	1	2	.....	.....	.....	.....	.....
Portage	20	10	10	.....	12	4	8	.....	9	1	8	.....	.....	.....	.....	.....
Price	9	6	3	.....	2	2	.....	.....	4	2	2	.....	.....	.....	.....	.....
Racine	59	33	23	3	27	17	10	.....	7	3	3	1	.....	.....	.....	.....
Richland	10	7	3	.....	6	1	5	.....	2	1	1	.....	.....	.....	.....	.....
Rock	42	19	23	.....	19	8	11	.....	12	5	7	.....	.....	.....	.....	.....
Rusk	9	7	2	.....	6	2	4	.....	1	.....	1	.....	.....	.....	.....	.....
St. Croix	13	7	6	.....	4	2	2	.....	8	7	1	.....	.....	.....	.....	.....
Sauk	20	10	10	.....	17	10	7	.....	4	1	3	.....	.....	.....	.....	.....
Sawyer	10	7	3	.....	8	4	4	.....	2	1	1	.....	.....	.....	.....	.....
Shawano	40	22	15	3	16	10	6	.....	9	7	2	.....	.....	.....	.....	.....
Sheboygan	38	16	21	1	27	15	12	.....	13	6	7	.....	.....	.....	.....	.....
Taylor	9	5	3	1	12	7	5	.....	4	3	1	.....	.....	.....	.....	.....
Trempealeau	5	2	3	.....	2	2	.....	.....	2	2	.....	.....	.....	.....	.....	.....
Vernon	19	10	9	.....	8	2	6	.....	3	1	2	.....	.....	.....	.....	.....
Vilas	2	1	1	.....	.....	.....	.....	.....	3	1	2	.....	.....	.....	.....	.....
Walworth	10	4	6	.....	12	5	7	.....	1	1	.....	.....	.....	.....	.....	.....
Washburn	3	.....	3	.....	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington	8	5	3	.....	4	1	3	.....	4	3	1	.....	.....	.....	.....	.....
Waukesha	29	18	11	.....	14	6	8	.....	21	10	10	1	.....	.....	.....	.....
Waupaca	25	20	4	1	16	9	7	.....	8	6	2	.....	.....	.....	.....	.....
Waushara	13	8	4	1	10	6	4	.....	2	1	1	.....	.....	.....	.....	.....
Winnebago	38	20	16	2	13	7	6	.....	19	8	10	1	.....	.....	.....	.....
Wood	22	10	12	.....	8	5	3	.....	15	3	12	.....	.....	.....	.....	.....
Total	1,623	899	681	43	1,050	543	507	.....	894	457	430	7	12	8	4	.....

TABLE No. 6—SHOWING BIRTHS REPORTED FROM JAN. 1, 1921 TO DEC. 31, 1921, CLASSIFIED BY COUNTIES, SEX AND NATIVITY OF PARENTS

County	Total Births, Exclusive of Still-births	Sex			Still-births	Twin-births	Triplets	Illegitimate	Parentage					Attended by		
		Male	Female	Not stated					Both Parents Native Born	Father Native and Mother Foreign	Mother Native and Father Foreign	Both Parents Foreign Born	Birth-place of one or Both Parents Unknown	Physician	Mid-wife	Others
Adams	182	92	90	.....	4	4	.....	1	153	4	10	12	3	166	5	11
Ashland	598	316	282	.....	21	24	.....	14	348	35	89	117	9	555	31	12
Barron	884	420	463	1	20	17	.....	13	663	33	103	76	9	809	20	55
Bayfield	367	192	175	.....	14	14	.....	4	203	21	46	92	5	273	24	70
Brown	1,622	837	782	3	57	47	.....	100	1,378	34	82	44	84	1,564	26	32
Buffalo	378	201	177	.....	11	10	.....	4	344	9	17	4	4	345	13	20
Burnett	238	116	122	.....	6	5	.....	1	183	8	27	17	3	193	11	34
Calumet	389	189	200	.....	14	8	.....	4	362	4	10	10	3	386	1	2
Chippewa	831	429	402	.....	20	12	.....	7	682	27	53	60	9	748	53	30
Clark	853	431	422	.....	23	10	.....	6	630	41	73	106	3	708	29	116
Columbia	596	307	284	5	8	9	.....	7	496	20	43	31	6	590	2	4
Crawford	382	195	187	.....	10	8	.....	3	360	4	14	3	1	365	2	15
Dane	1,958	966	981	11	44	48	.....	17	1,541	67	139	199	12	1,939	9	10
Dodge	1,118	563	553	2	44	28	3	9	904	31	89	84	10	1,098	15	5
Door	470	238	232	.....	20	7	3	3	422	19	22	4	3	419	27	24
Douglas	1,127	573	554	.....	39	32	.....	19	637	57	182	240	11	996	73	58
Dunn	668	358	308	2	18	22	.....	8	567	22	49	20	10	629	15	24
Eau Claire	985	505	480	.....	41	12	.....	21	851	18	66	31	19	844	115	26
Florence	72	33	39	.....	3	.....	.....	.....	44	7	9	12	.....	44	16	12
Fond du Lac	1,269	625	639	5	48	21	.....	9	1,097	32	58	76	6	1,266	1	2
Forest	275	138	136	1	10	8	.....	5	213	9	24	25	4	260	7	8
Grant	917	491	423	3	31	20	.....	13	848	15	27	18	9	913	.....	4
Green	492	254	238	.....	12	.....	.....	5	369	23	45	52	3	486	3	3
Green Lake	251	137	113	1	8	6	.....	5	217	5	13	15	1	246	2	3
Iowa	494	248	243	3	16	5	.....	6	429	9	28	23	5	492	.....	2
Iron	228	111	117	.....	5	3	.....	4	65	16	40	104	3	183	25	20
Jackson	364	179	184	1	13	2	.....	5	305	9	28	19	3	323	21	20
Jefferson	705	366	338	1	20	11	.....	14	612	23	39	23	8	700	2	3
Juneau	433	209	223	1	14	6	.....	7	340	13	34	39	7	411	6	16
Kenosha	1,270	673	596	1	44	39	.....	8	653	53	127	431	6	1,075	183	12

Kewaunee	349	171	178	.....	10	14	.....	4	331	2	8	4	4	339	7	3
La Crosse	1,080	534	543	3	43	10	.....	30	948	22	58	33	19	1,066	12	2
Lafayette	364	186	176	2	16	6	.....	2	316	3	25	19	1	361	1	2
Langlade	725	352	373	.....	25	2	.....	9	593	22	66	41	3	641	43	41
Lincoln	507	275	232	.....	13	8	.....	4	382	31	46	46	2	469	6	32
Manitowoc	1,308	668	639	1	22	16	.....	6	1,160	19	78	44	7	1,269	37	2
Marathon	1,874	925	948	1	65	36	.....	22	1,451	72	189	136	26	1,600	138	136
Marinette	793	396	397	.....	25	16	.....	17	543	37	106	97	10	669	74	50
Marquette	230	124	105	1	2	1	.....	1	206	6	11	5	2	213	2	15
Milwaukee	12,665	6,579	6,084	2	278	170	6	360	7,394	563	1,383	3,023	302	10,596	2,034	35
Monroe	710	380	330	.....	17	4	.....	10	630	15	40	15	10	681	6	23
Oconto	708	344	363	1	13	12	3	10	496	32	83	91	6	623	29	56
Oneida	359	173	185	1	15	2	.....	5	266	13	30	43	7	333	14	12
Outagamie	1,320	651	667	2	37	12	.....	11	1,106	37	91	74	12	1,204	104	12
Ozaukee	342	178	163	1	11	.....	.....	3	299	6	16	17	4	342	.....	.....
Pepin	162	83	79	.....	.....	.....	.....	3	147	4	6	3	2	143	2	17
Pierce	453	234	218	1	11	7	.....	6	402	14	13	18	6	435	3	15
Polk	706	362	343	1	27	4	.....	6	520	32	90	56	8	668	6	32
Portage	932	488	444	.....	21	16	.....	7	768	33	68	54	9	757	137	38
Price	479	235	244	.....	13	11	.....	1	287	27	73	84	8	409	32	38
Racine	1,762	890	870	2	48	12	.....	9	1,029	80	190	453	10	1,349	412	1
Richland	537	259	278	.....	11	2	.....	8	509	5	13	5	5	527	5	5
Rock	1,370	696	673	1	40	4	.....	10	1,127	44	97	92	10	1,368	.....	2
Rusk	521	258	263	.....	5	10	.....	1	370	14	50	81	6	425	34	62
St. Croix	602	300	302	.....	3	4	.....	.....	475	30	67	28	2	595	2	5
Sauk	651	332	316	3	5	6	.....	.....	578	12	42	18	1	646	1	4
Sawyer	215	111	103	1	2	.....	.....	1	155	10	20	29	1	172	14	29
Shawano	811	407	403	1	2	4	.....	6	675	19	74	36	7	750	25	36
Sheboygan	1,375	687	685	3	27	8	.....	12	963	44	106	255	7	1,314	60	1
Taylor	496	240	256	.....	6	5	.....	2	311	25	60	98	2	381	51	64
Trempealeau	570	298	272	.....	12	.....	.....	5	495	18	44	9	4	529	5	36
Vernon	737	377	360	.....	21	8	.....	11	644	18	58	11	6	682	26	29
Vilas	149	67	81	1	8	.....	.....	1	100	6	15	25	3	141	.....	8
Walworth	499	266	232	1	15	6	.....	8	403	13	42	33	8	499	.....	.....
Washburn	294	156	138	.....	18	4	.....	2	226	7	31	25	5	268	12	14
Washington	565	288	276	1	13	8	.....	2	510	10	22	21	2	565	.....	.....
Waukesha	932	470	462	.....	23	10	.....	16	729	39	70	86	8	929	1	2
Waupaca	757	374	383	.....	17	17	.....	5	647	26	62	15	7	713	16	28
Waushara	348	178	170	.....	6	16	.....	3	284	7	37	18	2	346	.....	2
Winnebago	1,475	741	733	1	42	4	.....	26	1,205	49	97	105	19	1,378	91	6
Wood	1,015	541	474	.....	37	11	.....	12	806	47	91	58	13	983	3	29
Total	62,163	31,666	30,424	73	1,663	924	15	979	46,402	2,181	5,354	7,391	835	56,404	4,182	1,577

TABLE No. 7—SHOWING STILLBIRTHS, TWIN BIRTHS AND ILLEGITIMATE BIRTHS REPORTED FROM JAN. 1, 1921 TO DEC. 31, 1921

	Stillbirths				Twin Births				Illegitimate Births				Triplets			
	Total	Male	Female	Not Stated	Total	Male	Female	Not Stated	Total	Male	Female	Not Stated	Total	Male	Female	Not Stated
Adams	4	1	2	1	4	3	1		1	1						
Ashland	21	13	8		24	13	11		14	10	4					
Barron	20	13	7		17	12	5		13	5	8					
Bayfield	14	9	5		14	6	8		4	1	3					
Brown	57	32	21	4	47	19	28		100	58	42					
Buffalo	11	5	6		10	3	7		4	2	2					
Burnett	6	5	1		5	2	3		1		1					
Calumet	14	9	5		8	2	6		4		4					
Chippewa	20	11	9		12	8	4		7	3	4					
Clark	23	11	12		10	6	4		6	4	2					
Columbia	8	5	2	1	9	4	4	1	7	2	5					
Crawford	10	5	4	1	8	7	1		3		3					
Dane	44	26	14	4	48	25	23		17	5	12					
Dodge	44	22	16	6	28	10	18		9	3	5	1	3		3	
Door	20	10	9	1	7	2	5		3	1	2		3	2	1	
Douglas	39	15	24		32	16	16		19	10	9					
Dunn	18	11	7		22	9	13		8	5	3					
Eau Claire	41	19	22		12	5	7		21	12	9					
Florence	3	2	1													
Fond du Lac	48	21	24	3	21	9	12		9	5	4					
Forest	10	6	4		8	3	4	1	5	1	4					
Grant	31	16	12	3	20	11	9		13	7	5	1				
Green	12	8	4						5	3	2					
Green Lake	8	4	3	1	6	2	4		5	2	3					
Iowa	16	7	9		5	3	2		6	4	2					
Iron	5	1	3	1	3	3			4	1	3					
Jackson	13	5	7	1	2	2			5	4	1					
Jefferson	20	10	10		11	3	8		14	7	7					
Juneau	14	10	4		6	3	3		7	5	1	1				
Kenosha	44	25	19		39	16	23		8	2	6					

Kewaunee	10	5	5		14	9	5		4	1	3					
La Crosse	43	25	17	1	10	5	5		30	11	18	1				
Lafayette	16	9	7		6	3	3		2	1	1					
Langlade	25	15	10		2		2		9	4	5					
Lincoln	13	9	3	1	8	2	6		4	1	3					
Manitowoc	22	11	9	2	616	7	9		6	4	2					
Marathon	65	33	29	3	36	24	12		22	13	9					
Marinette	25	15	10		16	6	10		17	9	8					
Marquette	2	1	1		1		1		1		1					
Milwaukee	278	162	113	3	170	91	79		360	198	162		6		6	
Monroe	17	8	9		4	4			10	3	7					
Oconto	13	5	7	1	12	9	3		10	4	6		3	3		
Oneida	15	9	6		2	1	1		5	2	3					
Outagamie	37	18	17	2	12	7	5		11	6	5					
Ozaukee	11	6	4	1					3	1	2					
Pepin									3		3					
Pierce	11	6	5		7	5	2		6	2	4					
Polk	27	10	17		4	3	1		6	5	1					
Portage	21	10	11		16	10	6		7	3	4					
Price	13	5	7	1	11	8	3		1		1					
Racine	48	29	16	3	12	6	6		9	5	3	1				
Richland	11	4	7		2	2			8	2	6					
Rock	40	22	17	1	4	1	3		10	5	5					
Rusk	5	3	1	1	10	4	6		1		1					
St. Croix	3	3			4	3	1									
Sauk	5	1	2	2	6	2	4									
Sawyer	2		2						1	1						
Shawano	2	1		1	4		4		6	4	2					
Sheboygan	27	17	8	2	8	4	4		12	8	4					
Taylor	6	4	2		5	1	4		2		2					
Trempealeau	12	4	8						5	2	3					
Vernon	21	16	5		8	6	2		11	5	6					
Vilas	8	5	3						1		1					
Walworth	15	9	6		6	4	1	1	8	2	6					
Washburn	18	11	7		4	3	1		2	1	1					
Washington	13	9	4		8	4	4		2	2						
Waukesha	23	13	10		10	4	6		16	7	9					
Waupaca	17	9	8		17	2	15		5	3	2					
Waushara	6	2	4		16	7	9		3	2	1					
Winnebago	42	22	18	2	4	3	1		26	17	9					
Wood	37	27	9	1	11	5	6		12	10	2					
Total	1,663	910	698	55	924	462	459	3	979	507	467	5	15	5	10	

MARRIAGES

Twenty-two thousand two hundred ninety-three marriages were reported to the state office for the calendar year of 1920. This represents an annual marriage rate of 16.9 persons married per thousand estimated population. Classifying the 1920 marriages according to the nativity of the bride and groom it is shown by Table No. 8 that 18,506 were marriages where both parties were native born; there were 689 marriages where the groom was native and the bride foreign; 1,738 marriages where the groom was foreign and the bride native; 1,313 marriages where both parties were foreign born and in 47 cases the birthplace of one or both parties was unknown or not stated. The tabulation of marriages by age groups for 1920 is shown by Table No. 9. Investigations extending over a series of years prove quite conclusively that neither native women nor native men are inclined to marry persons of foreign birth to any extent. There is, however, a much stronger tendency on the part of native born women to marry foreign men than there is on the part of native men to marry foreign born women.

The enactment of the so-called uniform marriage law providing for the filing of an application for a license five days before the license is issued and also requiring that the application be posted in some conspicuous place in the county clerk's office has been a factor, we believe, in inducing quite a number of men and women who live in the state to go out of the state to be married. It is to be hoped that congress will enact a uniform marriage and divorce law and if this is done this evil will be practically eliminated.

For 1921 the board recorded 18,759 marriages, which represents a marriage rate of 14.1 per thousand estimated population. Classifying the marriages according to the nativity of the bride and groom the records show that in 15,345 cases both parties were native born; in 605 cases the groom was native and the bride foreign; in 1,349 cases the bride was native and the groom foreign; in 1,419 cases both parties were foreign born and in 41 cases the birthplace of one or both parties was unknown or not stated.

TABLE No. 8—SHOWING MARRIAGES REPORTED TO THE STATE BUREAU OF VITAL STATISTICS FROM JAN. 1, 1920 TO DEC. 31, 1920, CLASSIFIED BY COUNTIES AND PLACE OF BIRTH

County	Total Marriages	Grooms		Brides		Both Parties Native Born	Groom Native Bride Foreign	Groom Foreign Bride Native	Both Parties Foreign Born	Birth place of one or Both Unknown	Native Born		Foreign Born		Unknown	
		Widowed	Divorced	Widowed	Divorced						Male	Female	Male	Female	Male	Female
Adams	50	4	4	5	1	48	.....	1	1	.....	48	49	2	1	.....	.....
Ashland	162	14	6	12	5	128	4	18	11	1	132	146	29	15	1	1
Barron	278	15	12	17	11	237	3	22	16	.....	240	259	38	19	.....	.....
Bayfield	68	5	1	6	2	54	.....	8	5	1	54	62	13	5	1	1
Brown	593	47	19	35	27	537	12	33	11	.....	549	570	44	23	.....	.....
Buffalo	108	1	2	2	2	101	2	4	1	.....	103	105	5	3	.....	.....
Burnett	33	3	2	3	.....	26	.....	6	1	.....	26	32	7	1	.....	.....
Calumet	122	5	3	5	3	117	2	3	.....	.....	119	122	3	.....	.....	.....
Chippewa	251	17	3	14	10	223	7	12	9	.....	230	235	21	16	.....	.....
Clark	275	22	6	13	4	234	4	22	13	2	238	256	35	17	2	2
Columbia	244	16	.....	18	3	223	3	13	5	.....	226	236	18	8	.....	.....
Crawford	134	9	.....	8	.....	126	.....	7	1	.....	126	133	8	1	.....	.....
Dane	726	22	4	10	3	656	3	48	19	.....	659	704	67	22	.....	.....
Dodge	412	24	9	28	9	353	7	29	23	.....	360	382	52	30	.....	.....
Door	152	5	.....	6	1	141	3	4	3	1	144	145	7	6	1	1
Douglas	254	21	9	20	10	174	16	35	29	.....	190	209	64	45	.....	.....
Dunn	217	12	5	11	4	192	7	15	3	.....	199	207	18	10	.....	.....
Eau Claire	338	20	18	19	12	307	12	17	1	1	319	324	18	13	1	1
Florence	17	.....	.....	.....	.....	12	1	4	.....	.....	13	16	4	1	.....	.....
Fond du Lac	488	29	11	32	7	446	6	26	10	.....	452	472	36	16	.....	.....
Forest	44	5	3	5	3	39	.....	4	1	.....	39	43	5	1	.....	.....
Grant	291	17	2	9	4	279	3	7	2	.....	282	286	9	5	.....	.....
Green	182	9	4	7	4	130	6	17	28	1	136	147	45	34	1	1
Green Lake	130	13	2	8	2	110	2	13	5	.....	112	123	18	7	.....	.....
Iowa	133	9	2	4	3	126	3	4	.....	.....	129	130	4	3	.....	.....

TABLE NO. 8—Continued

County	Total Marriages	Grooms		Brides		Both Parties Native Born	Groom Native Bride Foreign	Groom Foreign Bride Native	Both Parties Foreign Born	Birth place of one or Both Unknown	Native Born		Foreign Born		Unknown	
		Widowed	Divorced	Widowed	Divorced						Male	Female	Male	Female	Male	Female
Iron	65	5	.....	5	.....	28	3	17	17	.....	31	45	34	20	.....	.....
Jackson	80	4	1	1	1	72	.....	6	2	.....	72	78	8	2	.....	.....
Jefferson	309	16	2	12	8	286	7	12	3	1	293	298	15	10	1	1
Juneau	135	8	8	14	6	116	7	9	3	.....	123	125	12	10	.....	.....
Kenosha	445	27	20	21	36	268	16	65	91	5	284	333	156	107	5	5
Kewaunee	129	8	1	2	1	122	2	3	2	.....	124	125	5	4	.....	.....
La Crosse	351	26	14	16	11	316	5	24	6	.....	321	340	30	11	.....	.....
Lafayette	157	7	2	1	4	143	1	10	1	2	144	153	11	2	2	2
Langlade	205	11	9	14	11	189	2	9	5	.....	191	198	14	7	.....	.....
Lincoln	190	16	4	14	4	154	6	15	10	5	160	169	25	16	5	5
Manitowoc	473	21	8	19	9	437	3	25	7	1	440	462	32	10	1	1
Marathon	595	46	14	37	18	499	25	49	21	1	524	548	70	46	1	1
Marinette	164	13	1	9	5	136	3	19	6	.....	139	155	25	9	.....	.....
Marquette	111	5	4	3	3	106	1	3	1	.....	107	109	4	2	.....	.....
Milwaukee	5,872	447	313	462	344	4,311	282	610	662	7	4,593	4,921	1,272	944	7	7
Monroe	196	13	2	12	3	189	2	4	1	.....	191	193	5	3	.....	.....
Oconto	126	6	2	7	3	109	1	10	5	1	110	119	15	6	1	1
Oneida	119	9	1	13	8	95	8	10	6	.....	103	105	16	14	.....	.....
Outagamie	467	34	9	25	11	419	13	23	12	.....	432	442	35	25	.....	.....
Ozaukee	94	1	.....	1	1	88	.....	6	.....	.....	88	94	6	.....	.....	.....
Pepin	42	4	.....	2	.....	38	1	3	.....	.....	39	41	3	1	.....	.....
Pierce	140	5	1	5	1	132	1	6	1	.....	133	138	7	2	.....	.....
Polk	89	6	3	4	4	74	4	9	2	.....	78	83	11	6	.....	.....
Portage	290	24	4	16	4	271	5	11	3	.....	276	282	14	8	.....	.....
Price	121	7	4	5	2	89	12	14	6	.....	101	103	20	18	.....	.....

Racine	689	48	18	44	38	490	38	77	83	1	528	567	160	121	1	1
Richland	166	11	6	8	5	162	2	1	1	.....	164	163	2	3	.....	.....
Rock	479	40	18	28	15	409	9	37	24	.....	418	446	61	33	.....	.....
Rusk	119	9	1	13	7	93	5	13	8	.....	98	106	21	13	.....	.....
St. Croix	213	20	7	13	6	178	10	15	10	.....	188	193	25	20	.....	.....
Sauk	310	25	2	16	10	281	7	18	3	1	288	299	21	10	1	1
Sawyer	39	3	2	5	.....	35	2	.....	2	.....	37	35	2	4	.....	.....
Shawano	288	26	8	18	13	260	10	10	7	1	270	270	17	17	1	1
Sheboygan	539	44	11	34	14	428	23	49	39	.....	451	477	88	62	.....	.....
Taylor	125	10	3	5	3	101	7	8	9	.....	108	109	17	16	.....	.....
Trempealeau	173	7	1	7	.....	165	1	5	1	1	166	170	6	2	1	1
Vernon	215	13	3	8	4	200	2	8	2	3	202	208	10	4	3	3
Vilas	27	3	2	4	2	19	.....	1	7	.....	19	20	8	7	.....	.....
Walworth	220	21	5	10	8	209	3	5	3	.....	212	214	8	6	.....	.....
Washburn	64	5	3	7	3	52	1	7	3	1	53	59	10	4	1	1
Washington	230	16	1	10	4	205	5	14	5	1	210	219	19	10	1	1
Waukesha	326	29	6	15	12	280	9	23	14	.....	289	303	37	23	.....	.....
Waupaca	336	25	9	30	4	298	8	21	7	2	306	319	28	15	2	2
Waushara	134	7	3	11	2	113	1	16	3	1	114	129	19	4	1	1
Winnebago	609	45	25	26	39	535	20	45	6	3	555	580	51	26	3	3
Wood	325	17	10	12	11	287	10	21	5	2	297	308	26	15	2	2
Total	22,293	1,537	698	1,341	829	18,506	689	1,738	1,313	47	19,195	20,246	3,051	2,000	47	47

TABLE No. 9.—SHOWING MARRIAGES REPORTED FROM JAN. 1, 1920, TO DEC. 31, 1920, ARRANGED ACCORDING TO AGE GROUPS

County	Total Marriages	Under 15 Yrs.	Age Groupings											Age Not Stated
			15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–79	80+	
Adams	50													
Brides			18	19	8	1	1				3			
Grooms			1	20	15	7	2	2				3		
Ashland	162													
Brides			36	69	35	8	6	2	2		1	2		1
Grooms			1	42	65	30	12	3	4	2		2		1
Barron	278													
Brides			89	109	54	15	1	2	3	3		2		
Grooms			5	104	95	38	17	7	1	4	3	4		
Bayfield	68													
Brides			13	24	16	7	3	2	2			1		
Grooms				17	24	14	5	2	3	2		1		
Brown	593													
Brides			147	232	123	40	17	18	7	2	1	6		
Grooms			13	243	178	69	47	12	13	5	4	9		
Buffalo	108													
Brides			24	55	21	2	4	1			1			
Grooms				44	38	17	5		1	1		1		1
Burnett	33													
Brides			4	15	10	1	1	2						
Grooms			1	7	13	6	1	1	1	1	2			
Calumet	122													
Brides			17	69	25	4	3	1	1	1		1		
Grooms			1	48	48	18	3		2			2		
Chippewa	251													
Brides			64	100	46	23	5	3	3	1	2	4		
Grooms			6	91	85	34	18	4	6	1	2	3	1	
Clark	275													
Brides			82	116	48	12	6	2	4	2		2		1
Grooms			5	103	107	27	13	4	4	6	1	5		
Columbia	244													
Brides			44	109	52	19	12	2	2		2	1		1
Grooms			6	90	78	34	14	8	6	5		3		
Crawford	134													
Brides			38	67	15	9	1	2	1		1			
Grooms			9	51	36	23	7	2	4		2			
Dane	726													
Brides			139	304	189	41	18	17	7	6	3	2		
Grooms			7	242	266	117	51	9	14	9	5	6		
Dodge	412													
Brides			102	178	73	32	15	3	3	2	3	1		
Grooms			9	146	136	64	28	16	5	2	2	3		1
Door	152													
Brides			45	68	23	10	2		3			1		
Grooms			4	62	55	19	6	3		2		1		
Douglas	254													
Brides			48	99	64	19	10	4	5	2	3			
Grooms			2	75	102	28	23	8	3	6	5	1		1
Dunn	217													
Brides			54	100	36	16	4	3	2	1	1			
Grooms			6	75	79	29	15	8	1	2	2			
Eau Claire	338													
Brides			69	157	63	21	8	5	8	3		2		2
Grooms			5	134	119	31	21	10	5	7	2	3		1
Florence	17													
Brides			6	6	5									
Grooms			0	4	6	3	2	2						
Fond du Lac	488													
Brides			91	228	97	35	14	7	5	3	6	2		
Grooms			5	197	159	63	22	20	3	4	6	9		
Forest	44													
Brides			22	10	3	5	1	3						
Grooms			4	10	10	9	5	4		2				

TABLE NO. 9—Continued

County	Total Marriages	Under 15 Yrs.	Age Groupings											Age Not Stated
			15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–79	80+	
Grant	291													
Brides			69	134	54	21	5	1	2	2	3			
Grooms			9	128	94	33	14	3	1	5	2	2		
Green	182													
Brides			45	81	38	5	8	4	1					
Grooms			8	81	56	22	8	4		2	1			
Green Lake	130													
Brides			21	70	21	3	7	2	2	1		2		1
Grooms			2	48	47	16	5	1	4	3	1	3		
Iowa	133													
Brides			23	58	25	15	5	4	2			1		
Grooms				54	45	13	8	8	1		2	2		
Iron	65													
Brides			19	24	16	3		2	1					
Grooms				17	31	14	1	1				1		
Jackson	80													
Brides			26	35	11	2	3	2				1		
Grooms				28	33	11	3	2	2			1		
Jefferson	309													
Brides			53	130	73	24	6	6	3	2	2	1		
Grooms			5	113	109	43	17	6	4	1	4	7		
Juneau	135													
Brides			24	62	25	10	3	6	1	1	2	1		
Grooms				42	50	19	11	1	2	4	3	3		
Kenosha	445													
Brides			111	172	93	33	16	6	4	3	1			6
Grooms			9	185	148	48	22	15	7	3	2	1		5
Kewaunee	129													
Brides			25	63	32	3	3	2		1				
Grooms			5	55	44	12	9	2		2				
La Crosse	351													
Brides			61	168	70	29	6	5	6	3	2	1		
Grooms			4	124	115	52	24	17	5	3	3	4		
Lafayette	157													
Brides			33	70	34	11	6		2		1			
Grooms			3	59	54	25	7	3	2	2	1	1		
Langlade	205													
Brides			55	89	31	12	2	8	5		3			
Grooms			8	70	72	30	6	10	5	2	2			
Lincoln	190													
Brides			52	70	43	10	2	6	1	1	1	3		1
Grooms			5	67	67	27	10	2	5	1	2	3		1
Manitowoc	473													
Brides			94	247	91	16	14	5	3	2	1			
Grooms			14	217	149	55	18	6	4	4	3	3		
Marathon	595													
Brides			151	279	102	27	14	7	9	2	2	2		
Grooms			14	222	225	73	26	17	8	3	3	3		1
Marinette	164													
Brides			35	71	36	12	3		2	2	1	2		
Grooms			4	54	63	17	12	3	2	1	3	2		3
Marquette	111													
Brides			31	50	18	6	1	1	1	1	1	1		
Grooms			4	39	44	13	5			2	1	3		
Milwaukee	5,872													
Brides			1011	2590	1205	502	240	133	87	51	30	19		4
Grooms			83	2148	1917	788	430	200	141	69	46	49		1
Monroe	196													
Brides			53	88	27	13	6	4	2		1	1		1
Grooms			6	88	47	35	4	5	4	2	2	2		1
Oconto	126													
Brides			34	50	28	7	2	1		2		1		1
Grooms			2	49	48	12	7	2	2	1	3			
Oneida	119													
Brides			36	42	22	8	3	2	5	1				
Grooms			5	47	32	14	8	3	6	1	2	1		

TABLE NO. 9—Continued

County	Total Marriages	Age Groupings												Age Not Stated
		Under 15 Yrs.	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–79	80+	
Outagamie	467													
Brides			90	228	99	20	11	5	4	3	1	3		
Grooms			14	173	191	36	23	11	7	5	3	4		
Ozaukee	94													
Brides			14	41	27	5	4	2	1					
Grooms			1	37	33	17	2	1	1	1	1			
Pepin	42													
Brides			11	19	7	3					1	1		
Grooms			1	13	19	2	1	3	1			2		
Pierce	140													
Brides			31	63	28	12	2		3	1				
Grooms			2	44	59	21	6	4	2	1		1		
Polk	89													
Brides			22	39	15	6		2		2	1			2
Grooms			4	29	32	12	5		2	1	1	1		2
Portage	290													
Brides			75	147	38	13	7	3	3	3	1			
Grooms				128	101	31	9	8	8	5				
Price	121													
Brides			35	54	20	3	5	1		1		2		
Grooms			3	61	31	12	4	5	2	1		2		
Racine	689													
Brides			117	305	159	58	18	14	7	6	2	3		
Grooms			7	260	241	98	34	18	14	8	2	6	1	
Richland	166													
Brides			65	65	25	3	2	2	1	1	1			1
Grooms			12	79	40	19	5		2	5	2	1		1
Rock	479													
Brides			120	176	110	29	19	8	9	2	4	2		
Grooms			17	180	154	56	21	13	16	5	7	8		2
Rusk	119													
Brides			40	46	16	5	3	3	3	1	1	1		
Grooms			6	48	29	13	8	5	4	2	1	3		
St. Croix	213													
Brides			33	96	52	12	5	7	3	3	1	1		
Grooms				72	84	31	7	3	4	8	1	3		
Sauk	310													
Brides			73	149	44	13	15	2	6	4	3	1		
Grooms			9	106	102	49	16	10	5	3	8	2		
Sawyer	39													
Brides			9	21	4	1		2	2					
Grooms			3	12	15	4	2		2		1			
Shawano	288													
Brides			97	112	40	19	11	3	5			1		
Grooms			5	133	88	32	12	7	7	1	1	2		
Sheboygan	539													
Brides			113	250	113	26	15	6	7	1	2	6		
Grooms			17	209	202	53	23	13	3	4	8	7		
Taylor	125													
Brides			40	58	17	6	2		1	1				
Grooms			2	47	48	13	7	3	3	1	1			
Trempealeau	173													
Brides			46	80	33	6	4	1	1	1		1		
Grooms			4	62	72	19	8	2	3			1		2
Vernon	215													
Brides		1	79	98	17	8	3	4	1	1	1	2		
Grooms			9	103	68	14	3	7	4	2	3	2		
Vilas	27													
Brides			9	8	2	3	2	1		2				
Grooms				10	4	4	2	1	4	1		1		
Walworth	220													
Brides			41	99	50	10	7	7	2	3	1			
Grooms			6	88	71	23	8	6	6	7	3	2		
Washburn	64													
Brides			24	25	5	4	2			2		2		
Grooms			4	22	15	10	6	3	1	1		2		

TABLE NO. 9—Continued

County	Total Marriages	Age Groupings												Age Not Stated
		Under 15 Yrs.	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–79	80+	
Washington	230													
Brides		.....	33	101	59	20	7	3	6	.....	1	.....	.....	.....
Grooms		.....	3	75	96	29	11	6	2	6	1	1	.....	.....
Waukesha	326													
Brides		.....	53	154	64	28	13	6	4	2	.....	2	.....	.....
Grooms		.....	6	113	108	45	25	10	7	5	3	4	.....	.....
Waupaca	336													
Brides		.....	85	141	56	27	6	5	3	3	.....	10	.....	.....
Grooms		.....	5	121	125	45	9	7	3	5	2	14	.....	.....
Waushara	134													
Brides		.....	31	54	34	7	2	3	.....	1	.....	2	.....	.....
Grooms		.....	2	58	43	16	6	3	.....	2	.....	4	.....	.....
Winnebago	609													
Brides		.....	112	265	140	48	25	9	6	1	1	2	.....	.....
Grooms		.....	26	208	204	89	30	19	10	7	6	3	.....	2
Wood	325													
Brides		.....	65	165	59	19	6	5	2	1	.....	1	.....	2
Grooms		.....	4	138	99	49	13	3	8	4	4	1	.....	2
Total	22,298													
Brides		1	4780	9845	4434	1506	683	390	277	147	100	106	.....	24
Grooms		.....	452	8469	7583	2894	1278	607	412	263	181	124	2	28

TABLE No. 10—SHOWING MARRIAGES REPORTED TO THE STATE BUREAU OF VITAL STATISTICS FROM JAN. 1, 1921, TO DEC. 31, 1921, CLASSIFIED BY COUNTIES AND PLACE OF BIRTH

Counties	Total Marriages	Grooms		Brides		Both Parties Native Born	Groom Native, Bride Foreign	Groom Foreign, Bride Native	Both Parties Foreign Born	Birthplace of one or Both Unknown	Native Born		Foreign Born		Unknown	
		Widowed	Divorced	Widowed	Divorced						Male	Female	Male	Female	Male	Female
Adams	40	3	1	5	1	37	1	1	1	.....	38	38	2	2	.....	.....
Ashland	119	16	3	15	4	87	2	8	22	.....	89	95	30	24	.....	.....
Barron	258	20	6	20	11	211	15	21	11	.....	226	232	32	26	.....	.....
Bayfield	60	6	1	4	2	39	2	10	9	.....	41	49	19	11	.....	.....
Brown	544	43	12	35	15	491	15	30	8	.....	506	521	38	23	.....	.....
Buffalo	101	5	1	5	.....	95	.....	3	2	1	95	98	5	2	1	1
Burnett	31	3	.....	.....	1	27	.....	1	3	.....	27	28	4	3	.....	.....
Calumet	107	11	.....	7	.....	101	2	1	3	.....	103	102	4	5	.....	.....
Chippewa	251	24	6	17	6	218	9	16	8	.....	227	234	24	17	.....	.....
Clark	229	15	5	21	6	177	11	26	15	.....	188	203	41	26	.....	.....
Columbia	200	22	4	11	4	178	4	12	4	2	182	190	16	8	2	2
Crawford	118	9	3	9	2	114	2	1	.....	1	116	115	1	2	1	1
Dane	662	40	12	29	12	581	17	28	36	.....	598	609	64	53	.....	.....
Dodge	306	23	3	16	6	269	6	14	17	.....	275	283	31	23	.....	.....
Door	115	16	3	7	4	104	1	4	3	3	105	108	7	4	3	3
Douglas	213	18	11	17	8	146	11	23	32	1	157	169	55	43	1	1
Dunn	149	12	4	8	2	140	3	4	2	.....	143	144	6	5	.....	.....
Eau Claire	312	21	14	20	9	283	12	14	3	.....	295	297	17	15	.....	.....
Florence	13	1	.....	1	.....	10	.....	2	1	.....	10	12	3	1	.....	.....
Fond du Lac	431	37	11	24	19	399	6	16	10	.....	405	415	26	16	.....	.....
Forest	54	3	4	.....	3	42	1	4	6	1	43	46	10	7	1	1
Grant	234	16	1	11	3	225	4	3	2	.....	227	226	5	6	2	2
Green	174	15	5	15	1	124	9	10	31	.....	133	134	41	40	.....	.....
Green Lake	96	11	6	7	.....	87	1	4	3	1	88	91	7	4	1	1
Iowa	104	5	.....	3	1	97	3	2	2	.....	100	99	4	5	.....	.....

Iron	62	3	.....	7	1	22	5	9	26	.....	27	31	35	31	.....	.....
Jackson	78	11	7	10	4	68	3	3	4	.....	71	71	7	7	.....	.....
Jefferson	271	26	7	13	8	250	1	16	4	.....	251	266	20	5	.....	.....
Juneau	130	9	4	7	5	110	4	11	5	.....	114	121	16	9	.....	.....
Kenosha	270	32	9	25	13	138	16	31	83	2	154	169	114	99	2	2
Kewaunee	116	8	3	5	3	112	1	3	.....	.....	113	115	3	1	.....	.....
La Crosse	302	23	7	12	12	278	3	14	3	4	281	292	17	6	4	4
La Fayette	85	7	1	4	.....	76	3	5	.....	1	79	81	5	3	1	1
Langlade	172	9	10	10	13	149	7	13	3	.....	156	162	16	10	.....	.....
Lincoln	171	14	3	14	7	136	10	19	6	.....	146	155	25	16	.....	.....
Manitowoc	415	38	6	20	15	370	18	22	2	3	388	392	24	20	3	3
Marathon	466	29	11	32	19	417	11	24	14	.....	428	441	38	25	.....	.....
Marinette	153	14	1	11	.....	116	6	23	7	1	122	139	30	13	1	1
Marquette	73	5	3	2	4	67	1	1	1	3	68	68	2	2	3	3
Milwaukee	4,937	480	234	400	280	3,480	210	490	749	8	3,690	3,970	1,239	959	8	8
Monroe	191	18	5	8	4	175	2	11	3	.....	177	186	14	5	.....	.....
Oconto	116	4	.....	3	1	95	3	14	4	.....	98	109	18	7	.....	.....
Oneida	83	6	2	6	2	63	3	9	8	.....	66	72	17	11	.....	.....
Outagamie	368	29	8	21	10	333	6	20	9	.....	339	353	29	15	.....	.....
Ozaukee	97	10	1	5	2	92	2	.....	3	.....	94	92	3	5	.....	.....
Pepin	46	2	1	1	.....	43	.....	1	2	.....	43	44	3	2	.....	.....
Pierce	89	2	2	4	1	79	2	7	1	.....	81	86	8	3	.....	.....
Polk	96	6	4	4	.....	76	2	12	6	.....	78	88	18	8	.....	.....
Portage	252	26	11	16	9	220	2	22	8	.....	222	242	30	10	.....	.....
Price	121	6	3	6	2	77	8	23	13	.....	85	100	36	21	.....	.....
Racine	466	33	22	35	16	299	23	55	89	.....	322	354	144	112	.....	.....
Richland	151	15	6	12	4	146	1	4	.....	.....	147	150	4	1	.....	.....
Rock	320	27	5	16	11	279	11	13	17	.....	290	292	30	28	.....	.....
Rusk	128	9	2	11	4	103	9	9	5	2	112	112	14	14	2	2
St. Croix	197	13	12	10	14	161	8	18	10	.....	169	179	28	18	.....	.....
Sauk	252	22	4	13	13	237	4	8	3	.....	241	245	11	7	.....	.....
Sawyer	36	4	1	2	2	30	.....	4	2	.....	30	34	6	2	.....	.....
Shawano	247	21	11	21	10	218	6	17	6	.....	224	235	23	12	.....	.....
Sheboygan	468	28	10	25	8	402	7	30	29	.....	409	432	59	36	.....	.....
Taylor	122	9	1	6	4	101	3	12	6	.....	104	113	18	9	.....	.....

TABLE NO. 10—Continued

Counties	Total Marriages	Grooms		Brides		Both Parties Native Born	Groom Native, Bride Foreign	Groom Foreign, Bride Native	Both Parties Foreign Born	Birthplace of one or Both Unknown	Native Born		Foreign Born		Unknown	
		Widowed	Divorced	Widowed	Divorced						Male	Female	Male	Female	Male	Female
Trempealeau	176	14	1	13	.....	162	2	8	3	1	164	170	11	5	1	1
Vernon	175	10	6	6	3	165	2	8	.....	.....	167	173	8	2	.....	.....
Vilas	26	3	4	4	.....	22	1	1	2	.....	23	23	3	3	.....	.....
Walworth	162	16	7	11	4	150	3	8	1	.....	153	158	9	4	.....	.....
Washburn	57	4	1	4	5	51	1	4	1	.....	52	55	5	2	.....	.....
Washington	177	6	1	2	3	171	2	2	2	.....	173	173	4	4	.....	.....
Waukesha	266	19	13	18	10	229	9	15	13	.....	238	244	28	22	.....	.....
Waupaca	246	25	11	15	7	228	5	13	.....	.....	233	241	13	5	.....	.....
Waushara	116	16	3	9	3	99	3	5	8	1	102	104	13	11	1	1
Winnebago	556	49	23	31	26	484	27	27	15	3	511	511	42	42	3	3
Wood	334	22	16	19	14	284	12	27	9	2	296	311	36	21	2	2
Total	18,759	1,577	619	1,236	696	15,345	605	1,349	1,419	41	15,948	16,692	2,768	2,024	43	43

TABLE No. 11—SHOWING MARRIAGES REPORTED FROM JAN. 1, 1921, TO DEC. 31, 1921, ARRANGED ACCORDING TO AGE GROUPS

County	Total Marriages	Age Groupings												Age Not Stated
		Under 15 Yrs.	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–79	80+	
Adams	40													
Brides			11	18	6	1					2	2		
Grooms			1	10	11	8	6					4		
Ashland	119													
Brides			27	46	26	7	4	4	3	1		1		
Grooms			2	35	38	22	6	5	6	2	2	1		
Barron	258													
Brides			87	97	35	14	10	4	1	5		5		
Grooms			5	88	88	32	19	13	2	3	1	7		
Bayfield	60													
Brides			25	13	10	7	1	1	1	2				
Grooms			1	11	26	10	3	4	1	2	1			1
Brown	544													
Brides			127	230	109	35	22	5	6	6	2	2		
Grooms			25	204	175	67	36	11	10	4	8	4		
Buffalo	101													
Brides			24	41	26	3	2	2		3				
Grooms			1	40	34	12	5	2	2	1	1	3		
Burnett	31													
Brides			8	15	3	3	2							
Grooms			1	9	13	5	1	1				1		
Calumet	107													
Brides			28	50	14	6	4		4	1				
Grooms			5	39	42	8	5	3	1	2	1	1		
Chippewa	251													
Brides			57	111	46	16	6	3	4	3	4			1
Grooms			8	80	82	39	17	10	5	3	3	4		
Clark	229													
Brides			73	94	29	16	7	5	3			2		
Grooms				78	83	34	16	7	4	2	2	2		1
Columbia	200													
Brides			39	81	46	9	9	4	2	6	3	1		
Grooms			4	68	64	33	8	4	5	6	4	4		
Crawford	118													
Brides			34	50	14	6	4	3	3	2	1	1		
Grooms			4	48	34	11	8	5	2	2	3	1		
Dane	662													
Brides			113	284	156	60	21	11	6	2	4	5		
Grooms			10	226	250	86	40	20	10	2	5	12	1	
Dodge	306													
Brides			67	132	60	16	16	4	7	1	2	1		
Grooms			4	104	118	41	19	6	4	3	2	5		
Door	115													
Brides			31	40	21	8	6	5	1	1				2
Grooms			5	42	31	14	9	4	6	1	1			2
Douglas	213													
Brides			35	93	49	15	8	5	3	3	1			1
Grooms			3	58	87	33	13	7	6	5	1			
Dunn	149													
Brides			42	59	30	7	2	2	3		3	1		
Grooms			5	55	49	21	8	1	2	3		5		
Eau Claire	312													
Brides			66	140	58	18	14	5	4	2	3	1		1
Grooms			7	103	117	32	23	13	6	3	2	6		
Florence	13													
Brides			2	3	3	1	2	2						
Grooms				2	6	1	3			1				
Fond du Lac	431													
Brides			96	179	82	24	24	9	7	4	4	2		
Grooms			8	160	144	59	26	10	8	6	2	8		
Forest	54													
Brides			20	21	5	4	4							
Grooms			5	20	16	9	2		1	1				

TABLE NO. 11—Continued

County	Total Marriages	Age Groupings												Age Not Stated
		Under 15 Yrs	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–79	80+	
Grant	234													
Brides			44	110	42	17	8	3	5	2	1	2		
Grooms			5	92	75	27	11	6	10	1	2	5		
Green	174													
Brides			42	82	26	8	5	3		3	4	1		
Grooms			2	70	57	21	7	5	5	2	3	2		
Green Lake	90													
Brides			14	41	18	14	3	3		1		2		
Grooms			1	31	29	14	1	3	1	3	1	2		
Iowa	104													
Brides			23	47	18	6	2	2	1	1	1	1		
Grooms			3	40	30	15	1	1		2	1	3		
Iron	62													
Brides			10	25	8	1		1		1	1	1		
Grooms				15	23	13	6	1		2	1			
ackson	78													
Brides		1	19	20	13	8	3	4	1	2	2			
Grooms			1	21	26	11	3	5	2	5	2	2		
efferson	271													
Brides			50	120	52	19	11	3	3	1	2	1		
Grooms			3	87	95	42	17	12	3	2	2	4		
Juneau	130													
Brides			39	43	23	8	5	1	1	1	1			
Grooms			6	37	49	20	7	3	5	2		2		
Kenosha	270													
Brides			65	117	40	20	6	6	4	4	2	1		4
Grooms			6	82	108	31	17	7	4	5	1	6		3
Kewaunee	110													
Brides			24	53	26	5	3	1	1	1				
Grooms			5	51	30	13	3	5	2		1			
La Crosse	302													
Brides			53	137	51	28	12	6	8	3	2			1
Grooms			7	102	104	42	18	9	8	5	2	4		1
Lafayette	85													
Brides			22	30	21	9	3							
Grooms			2	31	27	16	6	2		1				
Langlade	172													
Brides			58	65	30	5	7	3	3	1				
Grooms			6	63	60	20	10	5	3	3	2			
Lincoln	171													
Brides			52	68	30	9	6	1		3	2			
Grooms			4	60	64	27	4	3	4	2		3		
Manitowoe	415													
Brides			77	210	80	18	10	9	7	1	3			
Grooms			8	155	152	49	20	9	4	4	4	1		
Marathon	466													
Brides			123	206	78	26	12	4	9	4		3		1
Grooms			20	165	168	50	10	15	8	9	2	5	1	
Marinette	153													
Brides			34	81	20	9	2	5	1		1			
Grooms			8	50	52	23	9	3	1	2	1			
Marquette	72													
Brides			23	28	10	6		1	2		2	1		
Grooms			2	26	28	6	3	3	1	2	1		1	
Milwaukee	4,937													
Brides			868	2115	1019	411	187	125	90	65	25	27		2
Grooms			77	1617	1684	720	354	172	110	76	64	57		1
Monroe	191													
Brides			47	83	42	7	5		3	2	1	1		
Grooms			4	72	62	24	11	5	3	5		5		
Oconto	116													
Brides			34	58	16	4	1		1		1			
Grooms			4	43	48	11	5	2	1	1	1			
Oneida	83													
Brides			32	29	11	1	3	3	2		1	1		
Grooms			4	29	28	9	4	3	1	3		2		

TABLE NO. 11—Continued

County	Total Marriages	Age Groupings													Age Not Stated
		Under 15 Yrs.	15-19	20-24	35-29	30-34	35-39	40-44	45-49	50-54	55-59	60-79	80+		
Outagamie	362														
Brides			87	168	65	20	10	6	3	5		4			
Grooms			6	156	124	36	16	16	1	4	5	5			
Ozaukee	97														
Brides			13	45	22	8	4	3	1		1				
Grooms			2	24	44	17	4	2	1	1	2				
Pepin	46														
Brides			14	21	6	1	1	2			1				
Grooms			1	21	17	1	2	3				1			
Price	89														
Brides			15	42	19	3	6	1	1		1	1			
Grooms				32	33	14	1	4	3			2			
Polk	96														
Brides			17	43	18	8	2	5	1			2			
Grooms			4	19	39	17	7	4	1	2	2	1			
Portage	252														
Brides			75	95	41	18	5	7	3	3	4	1			
Grooms			5	94	83	28	15	8	2	8	3	6			
Price	121														
Brides			53	45	10	6	4	1	1		1				
Grooms			2	48	37	18	10	5	1						
Racine	466														
Brides			86	209	95	35	18	8	6	6	2	1			
Grooms			4	143	172	78	35	11	8	7	5	3			
Richland	151														
Brides			72	39	14	10	5	2	3	2		4			
Grooms			15	63	36	12	8	3	5	1	2	6			
Rock	320														
Brides			47	150	77	29	8	6	2			1			
Grooms			5	112	112	52	21	3	6	5	2	2			
Rusk	128														
Brides			48	46	19	4	7		1	1		2			
Grooms			3	49	42	13	8	5	3			3	1	1	
St. Croix	197														
Brides			39	81	40	17	7	5	5	2	1				
Grooms			1	69	65	28	15	4	8	4	2	1			
Sauk	252														
Brides			54	105	48	18	9	3	10			5			
Grooms			3	84	87	36	11	13	9		1	8			
Sawyer	36														
Brides			9	16	4	1		1	2	1	1	1			
Grooms				12	11	3	1	4	1	2	1	1			
Shawano	247														
Brides			70	108	30	23	4	2	3	3	3	1			
Grooms			3	95	74	45	13	3	2	4	2	6			
Sheboygan	468														
Brides			79	231	105	26	10	6	4	7					
Grooms			8	186	165	61	22	8	6	5	6	1			
Taylor	122														
Brides			39	46	23	4	5	1	1	2	1				
Grooms			2	36	47	21	5	4	3	3	1				
Trempealeau	176														
Brides			37	80	35	12	4	2	2		1	3			
Grooms			2	73	51	20	11	5	4	3		2	1	4	
Vernon	175														
Brides			61	75	26	6	3	1		1				2	
Grooms			8	75	54	19	7	5	4	1		1		1	
Vilas	26														
Brides			5	11	4	2		1	1		1	1			
Grooms			1	8	5	4	3	1		2	1	1			
Walworth	162														
Brides			33	69	26	21	4	2	2	3	1	1			
Grooms			4	59	51	19	11	5	8	1	1	3			
Washburn	57														
Brides			16	25	7	4	1		2			2			
Grooms			2	19	17	6	4	5	1	2		1			
Washington	177														
Brides			35	83	41	8	5	2	2	1					
Grooms			1	72	71	20	3	6	3		1				

TABLE NO. 11—Continued

County	Total Marriages	Age Groupings												Age Not Stated
		Under 15 Yrs.	15-19	20-24	35-29	30-34	35-39	40-44	45-49	50-54	55-59	60-79	80+	
Waukesha	266													
Brides	.....	.....	43	109	63	14	21	8	3	2	3	.....	.....	.....
Grooms	.....	.....	9	80	88	42	14	16	6	5	1	5	.....	.....
Waupaca	246													
Brides	.....	.....	60	103	43	17	8	6	4	1	.....	4	.....	.....
Grooms	.....	.....	5	76	78	50	15	8	4	3	3	4	.....	.....
Waushara	116													
Brides	.....	.....	32	54	12	4	3	3	3	2	.....	3	.....	.....
Grooms	.....	.....	3	37	44	12	7	5	.....	2	1	5	.....	.....
Winnebago	556													
Brides	.....	.....	100	234	125	41	23	16	3	5	3	6	.....	.....
Grooms	.....	.....	29	212	160	65	37	17	12	9	5	10	.....	.....
Wood	334													
Brides	.....	.....	92	146	57	12	6	10	3	5	1	2	.....	.....
Grooms	.....	.....	15	118	119	35	19	8	6	6	2	6	.....	.....
Total	18,759	.....	4104	8062	3591	1291	644	368	276	190	107	111	.....	15
	.....	.....	429	6497	6443	2563	1155	586	363	269	179	255	5	15

DIVORCES

For the year ending Sept. 30, 1920, various courts of the state having jurisdiction in divorce proceedings reported 2,425 divorces. This represents an annual divorce rate of 108.7 per thousand marriages for that year; in 681 cases the divorce was granted to the husband and in 1,744 cases the wife obtained the divorce. The principal causes of divorce are as follows: Adultery 105; desertion 701; cruelty 1,079; drunkenness 42, and neglect to provide 347.

During the year ending Sept. 30, 1921, the board recorded 2,112 divorces, which represents an annual divorce rate of 112.5 per thousand marriages for that year. In 598 cases the divorce was granted to the husband and 1,514 cases the wife obtained the divorce. The principal causes for divorce as stated in the complaints for this year are as follows: Adultery, 75; cruelty, 986; desertion, 610; drunkenness 29, and neglect to provide 287.

TABLE No. 12—SHOWING DIVORCES FROM CERTAIN CAUSES. ARRANGED BY COUNTIES AND SEX OF PLAINTIFF FROM OCT. 1, 1919, TO SEPT. 30, 1920

County	All Causes		Adultery		Cruelty		Desertion		Drunkenness		Non-Support		Cases pending	Decree Denied
	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife		
Adams	1	5	....	....	....	2	1	3	....	....	....	....	....	....
Ashland	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Barron	1	16	....	....	....	8	1	7	....	....	....	1	....	....
Bayfield	2	8	....	1	....	1	2	5	....	....	....	....	....	2
Brown	18	58	1	1	10	39	6	9	....	....	....	6	....	....
Buffalo	2	3	....	....	....	1	1	2	....	....	....	....	....	....
Burnett	1	3	....	....	....	1	1	1	....	1	....	....	....	....
Calumet	....	2	....	....	....	1	....	1	....	....	....	....	....	....
Chippewa	4	14	....	1	....	6	4	3	....	....	....	2	....	....
Clark	8	18	....	....	3	9	5	6	....	....	....	2	....	....
Columbia	2	14	....	....	....	5	2	8	....	....	....	1	....	....
Crawford	4	7	1	....	....	2	2	3	....	....	....	2	....	....
Dane	24	51	3	3	11	28	10	10	....	1	....	7	....	2
Dodge	8	24	....	....	5	13	2	9	....	....	....	1	....	....
Door	1	8	....	....	....	4	1	2	....	1	....	....	....	....
Douglas	20	54	5	1	2	16	12	7	....	....	....	27	....	3
Dunn	5	6	....	....	1	....	4	2	....	1	....	2	....	1
Eau Claire	6	16	1	1	1	3	4	7	....	1	....	4	....	....
Florence	....	3	....	....	....	1	....	2	....	....	....	....	....	....
Fond du Lac	16	32	1	4	2	5	9	7	....	2	....	15	2	1
Forest	5	5	....	....	2	1	3	2	....	....	....	1	1	....
Grant	6	17	1	....	3	11	1	5	....	1	....	....	....	....
Green	6	5	2	1	....	1	3	2	....	....	....	....	....	....
Green Lake	1	3	....	....	....	3	1	....	....	....	....	....	....	....
Iowa	....	3	....	....	....	....	....	2	....	....	....	....	....	....

TABLE NO. 12—Continued

County	All Causes		Adultery		Cruelty		Desertion		Drunkenness		Non-Support		Cases pending	Decree Denied
	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife		
Iron	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jackson	....	7	....	1	....	4	....	....	....	....	....	2	....	....
Jefferson	6	14	2	....	1	8	3	4	....	....	....	....	....	1
Juneau	2	3	....	....	1	2	1	1	....	....	....	....	....	....
Kenosha	23	71	1	2	14	32	7	15	....	....	....	17	....	....
Kewaunee	....	....	....	....	....	....	....	....	....	....	....	....	....	....
La Crosse	11	34	....	1	8	15	3	5	....	2	....	10	....	4
Lafayette	4	12	....	1	....	7	3	2	....	....	....	2	....	....
Langlade	7	15	1	....	3	12	2	2	....	....	....	1	....	1
Lincoln	3	12	....	1	1	8	1	3	....	....	....	....	....	....
Manitowoc	8	23	....	....	4	18	3	4	....	....	....	1	....	....
Marathon	10	32	....	....	3	18	7	11	....	....	....	3	....	....
Marinette	6	19	1	....	3	7	2	5	....	....	....	7	....	....
Marquette	1	3	....	....	....	....	1	3	....	....	....	....	....	....
Milwaukee	214	499	20	2	88	225	66	109	2	8	....	119	....	....
Monroe	3	13	1	2	2	6	....	2	....	....	....	3	....	....
Oconto	5	9	....	....	....	8	5	1	....	....	....	....	....	....
Oneida	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Outagamie	14	37	....	....	7	27	7	8	....	....	....	2	....	....
Ozaukee	3	1	1	....	2	....	....	1	....	....	....	....	....	....
Pepin	....	3	....	....	....	....	....	1	....	....	....	....	....	....
Pierce	7	8	....	....	3	3	4	3	....	....	....	1	....	....
Polk	2	5	1	....	....	2	1	2	....	....	....	1	....	1
Portage	9	18	1	....	5	5	3	4	....	....	....	4	....	....
Price	2	7	....	....	....	5	2	2	....	....	....	....	....	....
Racine	45	91	3	3	19	41	21	14	....	1	....	29	....	3
Richland	3	15	....	....	....	10	3	3	....	....	....	2	....	....
Rock	34	98	7	6	9	35	16	20	....	6	....	27	....	2
Rusk	2	9	1	....	....	3	1	3	....	....	....	3	....	....
St. Croix	2	8	....	....	....	3	2	2	....	....	....	2	....	....
Sauk	8	12	....	1	3	6	4	3	....	....	....	1	....	....
Sawyer	....	4	....	....	....	1	....	3	....	....	....	....	....	....
Shawano	12	47	1	....	3	20	6	12	1	11	....	....	....	....
Sheboygan	1	10	....	....	....	6	1	1	....	....	....	3	....	....
Taylor	3	2	....	....	....	1	3	....	....	....	....	1	....	....
Trempealeau	1	7	....	1	....	3	1	2	....	....	....	1	....	....
Vernon	8	24	1	1	1	6	5	14	....	1	....	1	....	....
Vilas	1	1	1	....	....	....	....	1	....	....	....	....	....	....
Walworth	4	19	....	....	2	7	2	6	....	1	....	3	....	1
Washburn	1	11	....	....	....	3	1	7	....	....	....	1	1	1
Washington	4	4	....	....	2	4	2	....	....	....	....	....	....	....
Waukesha	21	27	2	1	8	15	6	2	....	1	....	5	....	....
Waupaca	9	15	1	....	6	11	2	3	....	....	....	1	....	2
Waushara	2	4	....	....	....	2	2	2	....	....	....	....	....	....
Winnebago	16	70	1	1	11	42	4	8	....	....	....	18	....	....
Wood	23	46	4	2	11	27	8	11	....	....	....	5	....	2
Total	681	1,744	66	39	266	819	286	415	3	39	....	347	4	27

TABLE No. 13—SHOWING DIVORCES FROM EACH CAUSE TABULATED BY COUNTIES FROM OCT. 1, 1919, TO SEPT. 30, 1920

County	Adultery				Bigamy	Cruelty				Desertion			Drunkenness		Fraud in Marriage	Insanity	Imprisonment	Impotency	Non-support	Refusal to Cohabit	Voluntary Separation	Other Cause or Cause not Stated	Cases Pending	Decree Denied
	Adultery	Adultery and Cruelty	Adultery, Cruelty and Non-support	Adultery and Desertion		Cruel and inhuman Treatment	Cruelty and Desertion	Cruelty, Desertion Drunkenness	Cruelty, Desertion and Non-support	Desertion	Desertion and Drunkenness	Desertion and Non-support	Drunkenness	Drunkenness and Non-support										
Adams						2				3		1												
Ashland																								
Barron						7	1			6	1	1							1					
Bayfield		1					1			6	1						1							2
Brown	2					48			1	13		2			1		1		6		1	1		
Buffalo						1				3					1									
Burnett						1				2			1											
Calumet						1				1														
Chippewa	1					5	1			7									2			2		
Clark						10	2			11								1	2					
Columbia						5				5		5							1					
Crawford				1		2				4		1							2			1		
Dane	4	2				36	3			15		5	1		1				7			1		2
Dodge						16	2			11									1			2		
Door						3			1	3				1			1							
Douglas	6					18				19					2		1		27		1			3
Dunn						1				5		1		1			1		2					1
Eau Claire	2					4				6		5		1					4					
Florence						1				2														
Fond du Lac	4	1				7				15		1		2	1				15		2		2	1
Forest						3				5									1			1	1	
Grant	1					8	6			6			1								1			
Green	3					1				5											2			
Green Lake						3				1														
Iowa										2											1			
Iron																								
Jackson	1					4													2					

TABLE NO. 13—Continued

County	Adultery					Cruelty				Desertion			Drunkenness												
	Adultery	Adultery and Cruelty	Adultery, Cruelty and Non-support	Adultery and Desertion	Bigamy	Cruel and inhuman Treatment	Cruelty and Desertion	Cruelty, Desertion Drunkenness	Cruelty, Desertion and Non-support	Desertion	Desertion and Drunkenness	Desertion and Non-support	Drunkenness	Drunkenness and Non-support	Fraud in Marriage	Insanity	Imprisonment	Impotency	Non-support	Refusal to Cohabit	voluntary Separation	Other Cause or Cause not Stated	Cases Pending	Decree Denied
Jefferson	2	..	..	..	..	9	..	..	..	6	..	1	..	..	..	..	..	..	..	..	1	1	..	1
Juneau	..	..	..	..	..	3	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Kenosha	3	..	..	..	2	46	..	..	..	17	..	5	..	..	..	1	..	..	17	..	1	2	..	....
Kewaunee	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
La Crosse	..	1	..	..	..	18	3	..	2	5	..	3	1	1	..	..	..	..	10	..	1	..	..	4
Lafayette	..	..	..	1	..	6	1	..	..	5	..	..	..	..	..	..	..	..	2	..	..	1	..	....
Langlade	1	..	..	..	..	14	1	..	..	4	..	..	..	..	..	..	..	..	1	..	1	..	..	1
Lincoln	1	..	..	..	..	9	..	..	..	4	..	..	..	..	..	..	..	..	..	..	1	..	..	....
Manitowoc	..	..	..	..	..	22	..	..	..	7	..	..	..	..	..	..	..	..	1	..	1	..	..	....
Marathon	..	..	..	..	..	19	2	..	..	14	..	4	..	..	..	..	..	..	3	..	..	..	..	....
Marinette	1	..	..	..	..	10	..	..	..	3	..	4	..	..	..	..	..	..	7	..	..	..	..	....
Marquette	..	..	..	..	..	..	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Milwaukee	17	3	0	2	10	280	21	..	12	127	0	48	7	3	12	0	10	..	119	0	11	30	..	....
Monroe	2	1	..	..	..	7	1	..	..	2	..	..	..	..	..	..	..	..	3	..	..	..	..	....
Oconto	..	..	..	..	..	8	..	..	..	5	..	1	..	..	..	..	..	..	..	..	..	..	..	....
Oneida	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Outagamie	..	..	..	..	..	30	3	..	1	15	..	..	..	..	..	..	..	..	2	..	..	..	..	....
Ozaukee	1	..	..	..	..	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	....
Pepin	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	1	..	..	....
Pierce	..	..	..	..	..	6	..	..	..	7	..	..	..	..	..	..	..	..	1	..	1	..	..	....
Polk	1	..	..	..	..	2	..	..	..	1	..	2	..	..	..	..	..	..	1	..	..	..	..	1
Portage	1	..	..	..	..	9	1	..	..	8	..	4	..	..	..	..	..	..	4	..	..	..	..	....
Price	..	..	..	..	..	5	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Racine	1	5	..	..	1	57	2	..	1	28	..	7	1	..	2	..	..	..	29	..	1	..	..	3
Richland	..	..	..	..	..	10	..	..	..	6	..	..	..	..	..	..	..	..	2	..	..	..	..	....
Rock	10	2	..	1	..	42	..	..	2	32	..	4	4	2	2	..	..	..	27	..	4	..	..	2
Rusk	..	..	..	1	..	2	1	..	..	3	..	1	..	..	..	..	..	..	3	..	..	..	..	....
St. Croix	..	..	..	..	..	2	1	..	..	4	..	..	..	..	..	..	..	..	2	..	..	1	..	....

Sauk		1				7	2			5		2					1		1		1			
Sawyer						1				3														
Shawano	1					22		1		15	3		11	1								5		
Sheboygan						6				2									3					
Taylor						1				3									1					
Trempealeau	1					3				3									1					
Vernon	1	1				2	4		1	12		7	1						1		2			
Vilas	1											1												
Walworth					1	9				5		3	1						3		1			1
Washburn						2	1			4		4							1				1	1
Washington						5	1			2														
Waukesha		2	1			21	2			6		2	1		2				5		2	4		
Waupaca	1					17				4	1								1					2
Waushara						2				4														
Winnebago	2					55				12								1	18					
Wood	5	1				32	6			17		2						1	5					2
Total	77	21	1	6	14	988	66	1	21	567	6	128	30	12	24	1	17	5	347		38	52	4	27

CAUSE, SEX, NATIVITY, PLACE OF MARRIAGE,
Table No. 14—SHOWING DIVORCES IN WISCONSIN FROM

Causes	Sex of Complainant	Number of Divorces	Nativity of Plaintiff			Nativity of Defendant			Place of Marriage				Gainful Occupation	Case Contested
			Native Born	Foreign Born	Unknown	Native Born	Foreign Born	Unknown	Wisconsin	United States	Foreign Countries	Unknown		
Adultery	Total	75	52	10	13	49	13	13	27	38	10	....	4	4
	Male	54	38	9	7	15	2	4	....	....	....	....	....	....
	Female	21	14	1	6	34	11	9	....	....	....	....	....	....
Adultery and cruelty	Total	22	19	1	2	17	2	3	14	7	1	....	3	2
	Male	7	4	1	2	13	1	1	....	....	....	....	....	....
	Female	15	15	....	....	4	1	2	....	....	....	....	....	....
Adultery, cruelty and non-support	Total	1	1	....	....	1	....	....	....	1	....	....	1	....
	Male	....	....	....	....	1	....	....	....	....	....	....	....	....
	Female	1	1	....	....	....	....	....	....	....	....	....	....	....
Adultery and desertion	Total	6	3	1	2	3	1	2	5	1	....	....	....	....
	Male	4	2	....	2	1	1	....	....	....	....	....	....	....
	Female	2	1	1	....	2	....	2	....	....	....	....	....	....
Bigamy	Total	15	8	7	....	8	6	1	10	5	....	....	4	....
	Male	5	3	2	....	4	6	....	....	....	....	....	....	....
	Female	10	5	5	....	4	....	1	....	....	....	....	....	....
Cruel and inhuman treatment	Total	988	695	172	121	637	213	138	639	305	38	6	175	185
	Male	237	162	54	21	471	169	111	....	....	....	....	....	....
	Female	751	533	118	100	166	44	27	....	....	....	....	....	....
Cruelty and desertion	Total	70	53	12	5	49	15	6	50	17	2	1	7	9
	Male	27	18	7	2	29	10	4	....	....	....	....	....	....
	Female	43	35	5	3	20	5	2	....	....	....	....	....	....
Cruelty, desertion and drunkenness	Total	1	1	....	....	1	....	....	1	....	....	....	....	....
	Male	....	....	....	....	1	....	....	....	....	....	....	....	....
	Female	1	1	....	....	....	....	....	....	....	....	....	....	....
Cruelty, desertion and Non-support	Total	21	17	3	1	16	5	....	11	8	2	....	11	....
	Male	....	....	....	....	16	5	....	....	....	....	....	....	....
	Female	21	17	3	1	....	....	....	....	....	....	....	....	....
Desertion	Total	559	385	104	70	355	114	90	316	203	35	5	58	13
	Male	286	193	59	34	172	56	45	....	....	....	....	....	....
	Female	273	192	45	36	183	58	45	....	....	....	....	....	....
Desertion and drunkenness	Total	6	4	....	2	1	1	4	3	2	....	1	1	....
	Male	....	....	....	....	1	1	4	....	....	....	....	....	....
	Female	6	4	....	2	....	....	....	....	....	....	....	....	....
Desertion and non-support	Total	128	105	9	14	92	18	18	79	46	2	1	51	3
	Male	....	....	....	....	92	18	18	....	....	....	....	....	....
	Female	128	105	9	14	....	....	....	....	....	....	....	....	....
Drunkenness	Total	29	22	5	2	21	4	4	20	8	1	....	3	5
	Male	4	1	2	1	18	4	3	....	....	....	....	....	....
	Female	25	21	3	1	3	....	1	....	....	....	....	....	....
Drunkenness and non-support	Total	12	11	1	....	10	....	2	11	1	....	....	4	1
	Male	....	....	....	....	10	....	2	....	....	....	....	....	....
	Female	12	11	1	....	....	....	....	....	....	....	....	....	....
Fraud in marriage	Total	24	20	4	....	17	5	2	6	18	....	....	12	3
	Male	7	5	2	....	11	4	2	....	....	....	....	....	....
	Female	17	15	2	....	6	1	....	....	....	....	....	....	....
Insanity	Total	1	....	1	....	....	1	....	....	1	....	....	....	....
	Male	....	....	....	....	....	1	....	....	....	....	....	....	....
	Female	1	....	1	....	....	....	....	....	....	....	....	....	....

OCT. 1, 1919, TO SEPT. 30, 1920, ARRANGED ACCORDING TO NUMBER OF CHILDREN AND DURATION OF MARRIAGE

Alimony		Number of Children in Family												Duration of Marriage							
Alimony Asked	Alimony Granted	No Children	1	2	3	4	5	6	7	8	9	10+	Not Stated	Under 6 Months	Under 1 Year	1–4	5–9	10–19	20–29	30+	Not Stated
17	24	45	11	11	6	....	1	....	....	....	....	....	1	5	1	31	22	13	3	....	....
8	9	8	6	4	4	....	....	....	....	....	....	....	....	....	1	6	8	5	2	....	....
....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....
1	1	1	3	....	....	....	1	1	....	....	....	....	....	....	....	....	2	3	1	....	....
2	2	13	2	....	....	....	....	....	....	....	....	....	....	2	2	8	2	1	....	....	....
535	538	420	253	121	71	46	23	11	13	6	5	6	13	16	65	301	248	212	101	36	9
30	28	27	13	11	5	6	5	1	2	....	....	....	....	....	....	20	15	19	10	5	1
1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....
12	9	7	8	2	1	1	....	....	....	....	....	1	1	....	1	6	10	1	1	2	....
144	189	294	119	59	39	21	14	1	2	3	....	2	5	1	6	157	171	153	43	23	5
1	2	....	4	2	....	....	....	....	....	....	....	....	....	....	....	2	2	2	....	....	....
58	50	54	41	13	6	8	3	....	....	1	....	1	1	....	1	43	38	30	14	2	....
16	15	12	4	3	3	3	1	....	1	....	....	....	2	1	....	7	7	10	3	....	1
8	8	3	5	1	1	1	....	1	....	....	....	....	....	1	....	2	5	2	2	....	....
4	4	22	2	....	....	....	....	....	....	....	....	....	....	3	3	14	2	2	....	....	....
....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....

TABLE NO. 14—

Causes	Sex of Complainant	Number of Divorces	Nativity of Plaintiff			Nativity of Defendant			Place of Marriage				Gainful Occupation	Case Contested
			Native Born	Foreign Born	Unknown	Native Born	Foreign Born	Unknown	Wisconsin	United States	Foreign Countries	Unknown		
Imprisonment	Total	16	11	3	2	6	7	3	10	5	1	....	7	....
	Male	16	11	3	2	....	....	....	....	....	....	....	....	....
	Female	....	....	....	....	6	7	3	....	....	....	....	....	....
Impotency	Total	5	1	3	1	2	2	1	4	1	....	....	1	....
	Male	....	....	....	....	2	2	1	....	....	....	....	....	....
	Female	5	1	3	1	....	....	....	....	....	....	....	....	....
Non-support	Total	356	271	51	34	249	65	42	214	131	10	1	153	31
	Male	....	....	....	....	249	65	42	....	....	....	....	....	....
	Female	356	271	51	34	....	....	....	....	....	....	....	....	....
Refusal to cohabit									....	....	....	....	....	....
									....	....	....	....	....	....
									....	....	....	....	....	....
Voluntary separation	Total	38	27	5	5	31	4	3	21	16	1	....	3	....
	Male	22	17	5	....	11	2	2	....	....	....	....	....	....
	Female	16	10	5	5	20	1	1	....	....	....	....	....	....
Other cause or causes not stated	Total	48	35	5	7	35	9	4	24	19	1	4	6	15
	Male	25	19	3	3	16	4	3	....	....	....	....	....	....
	Female	23	16	3	4	19	5	1	....	....	....	....	....	....
	Total	2421	1741	403	277	1603	485	339	1465	833	104	19	504	271

Continued

Alimony		Number of Children in Family												Duration of Marriage							
Alimony Asked	Alimony Granted	No Children	1	2	3	4	5	6	7	8	9	10+	Not Stated	Under 6 Months	Under 1 Year	1–4	5–9	10–19	20–29	30+	Not Stated
9	9	5	2	4	2	....	2	....	....	....	....	1	....	....	....	4	5	4	2	1	....
2	2	5	....	....	....	....	....	....	....	....	....	....	....	....	2	1	2	....	....	....	....
186	186	173	94	43	19	10	3	4	4	2	1	0	3	1	15	137	97	77	24	4	1
2	7	17	7	7	1	....	1	1	2	1	....	....	1	....	....	....	7	22	6	3	....
23	23	23	9	7	3	2	....	....	....	....	....	....	4	1	3	17	11	10	2	1	3
1059	1107	1130	584	288	162	98	54	20	24	13	6	11	31	31	100	756	656	566	215	77	20

TABLE No. 15—SHOWING DIVORCES FROM CERTAIN CAUSES, ARRANGED BY COUNTIES AND SEX OF PLAINTIFF FROM OCT. 1, 1920, TO SEPT. 30, 1921

County	All Causes		Adultery		Cruelty		Desertion		Drunkenness		Non-support			
	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife	Cases Pending	Decree Denied
Adams	2	3			1	2	1			1				
Ashland														
Barron	4	9			1	2	1	5				2		
Bayfield	2	7		1		3	2	2						1
Brown	21	51			12	38	6	6		1		3		
Buffalo	1	2				1		1						
Burnett	1	1			1									
Calumet		1				1								
Chippewa	6	13	1		2	6	3	5						
Clark	6	15	1			8	5	6				1		
Columbia	3	18	1	2	1	4	1	7				4		
Crawford	7	9	2		1	5	4	3						
Dane	31	49	4	1	10	27	10	5		1		10		
Dodge	8	10			5	6	2	2		1		1		
Door		8		1		3		2				2		
Douglas	27	66	3	1	8	26	15	5		3		26		1
Dunn	7	10			2	6	5	2		1		1		
Eau Claire	6	12			1	6	5	4				2		
Florence	1	1				1	1							
Fond du Lac	17	33	1	2	1	11	11	5		3		11		3
Forest	2	3			1		1	3						
Grant	4	20	1	2	2	12		3				3		
Green	5	5			1	3	3			1		1		
Green Lake	1	1	1			1							1	
Iowa	2	8			6		2	2						

Iron		4				1		2				1	1	
Jackson	5	9				4	5	4				1		
Jefferson	7	12			2	10	5	2						
Juneau	3	10		1	1	5	1	1				2		
Kenosha	22	61		2	11	28	7	15		1		10		
Kewaunee	1	2				2								
La Crosse	11	36	3	1	4	13	3	10		1		10		
Lafayette	1	6			1	1		3				1		
Langlade	5	18			2	15	3	2				1		
Lincoln	9	9			3	2	5	4				2		
Manitowoc	6	12	1		2	10	3	1				1		
Marathon	11	37	1		7	28	3	8				1		
Marquette	2	3					2	2				1	1	
Milwaukee	180	450	10	5	86	210	68	112		9		93		
Monroe	3	14	1	2	1	3	1	2				7		
Oconto	1	3				1	1	2						
Oneida	1	4				2	1					1		
Outagamie	7	32			2	23	3	7				2		
Ozaukee		5				3						1		
Pepin		3						1				2		
Pierce	3	6				2	2	2				2		
Polk	1	4				2	1	1				1		
Portage	8	31			3	16	5	7				8		
Price	1	2				2	1							
Racine	25	71	2	1	10	38	11	16		2		14		
Richland	2	16			2	14		1						
Rock	29	65	4	3	8	18	16	15		1		26		
Rusk	2	11	1			3	1	6				2		
St Croix	3	5			1	2	2	1				1		
Sauk	3	11		1	2	2		3		1		4		
Sawyer														
Shawano	10	15	3	1	1	6	4	7		1				
Sheboygan	5	26			3	12	1	10	1			4		
Taylor	4	7			1	4	3	3						
Trempealeau	1	2						1						

TABLE NO. 15—Continued

County	All Causes		Adultery		Cruelty		Desertion		Drunkenness		Non-support			
	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife	Granted to Husband	Granted to Wife	Cases Pending	Decree Denied
Vernon	1	2				1	1					1		
Vilas	1	3				2	1	1						
Walworth	1	15			1	7		7						
Washburn	2						2						4	
Washington	5	2	1		3		1					1		
Waukesha	10	36		1	5	21	2	5				8		
Waupaca	10	22	3	1	3	16	4	4				1		
Waushara	2	1			1		1	1						
Winnebago	18	60		1	9	39	8	10				10		
Wood	12	16			1	14	10	2						
Total	598	1,514	45	30	232	754	266	349	1	28	0	287	7	5

TABLE No. 16—SHOWING DIVORCES FROM EACH CAUSE TABULATED BY COUNTIES FROM OCT. 1, 1920, TO SEPT. 30, 1921

	Adultery					Cruelty				Desertion			Drunkenness									
	Adultery	Adultery and Cruelty	Adultery, Cruelty and Non-support	Adultery and Desertion	Bigamy	Cruel and Inhuman Treatment	Cruelty and Desertion	Cruelty, Desertion and Drunkenness	Cruelty, Desertion and Non-support	Desertion	Desertion and Drunkenness	Desertion and Non-support	Drunkenness	Drunkenness and Non-support	Fraud in Marriage	Insanity	Imprisonment	Impotency	Non-support	Refusal to Cohabit	Voluntary Separation	Other Causes or Cause not Stated
Adams						3				1			1									
Ashland																						
Barron						2	1			6									2		2	
Bayfield	1				1	3				3		1										
Brown					1	47	3			10		2		1	1		1		3		2	1
Buffalo						1				1					1							
Burnett							1												1			
Calumet						1																
Chippewa	1				1	7	1			6		2					1					
Clark	1					7	1			11									1			
Columbia			1	2		4	1			7		1							4		1	
Crawford	2					6				4		3					1					
Dane	2	2	1		1	35	2			10		5	1		1				10		9	1
Dodge					1	10	1			4			1						1			
Door	1					2			1	2									2			
Doug'as	3		1			33	1			19		1	3		1				26		5	
Dunn						8				7			1						1			
Eau Claire						7				5		4							2			
Florence						1						1										
Fond du Lac	2	1			1	11			1	13		3	1	2	1		1		11		2	

TABLE NO. 16—Continued

	Adultery					Cruelty				Desertion			Drunkenness									
	Adultery	Adultery and Cruelty	Adultery, Cruelty and Non-support	Adultery and Desertion	Bigamy	Cruel and Inhuman Treatment	Cruelty and Desertion	Cruelty, Desertion and Drunkenness	Cruelty, Desertion and Non-support	Desertion	Desertion and Drunkenness	Desertion and Non-support	Drunkenness	Drunkenness and Non-support	Fraud in Marriage	Insanity	Imprisonment	Impotency	Non-support	Refusal to Cohabit	Voluntary Separation	Other Causes or Cause not Stated
Forest						1				3		1										
Grant	2	1				14				2		1							3	1		
Green						4				2	1		1						1		1	
Green Lake	1					1																
Iowa						6				4												
Iron						1				2									1			
Jackson						4				9									1			
Jefferson						12				6		1										
Juneau			1			6				2									2		1	1
Kenosha	2				3	38	1			16	1	5	1		5		1		10			
Kewaunee						2																1
La Crosse	1	2	1			11	4		2	7		6		1	1				10			1
La Fayette						2				3									1			1
Langlade						16	1			3		2							1			
Lincoln						5				9							1		2		1	
Manitowoc	1					12				4							1					
Marathon		1				27	7		1	8		3							1			
Marinette																						
Marquette										4									1			
Milwaukee	5	5		5	6	268	21	2	5	128		52	6	3	6		3		93		10	12

Monroe	1	1	1			4				1		2							7			
Oconto						1				2		1										
Oneida						2				1							1		1			
Outagamie						24	1			8		2							2		2	
Ozaukee					1	3													1			
Pepin										1									2			
Pierce						2				4					1				2			
Polk						2				1		1							1			
Portage						18			1	11		1							8			
Price						2				1												
Racine	3				1	43	1		4	16		11	1	1	1				14			
Richland						15	1					1										1
Rock	6	1				25	1			28		3	1		1				26		2	
Rusk	1					1			2	2		5							2			
St. Croix						3				3									1			1
Sauk		1				3	1			2		1		1					4		1	
Sawyer																						
Shawano	4					7				9		2	1									2
Sheboygan						15				7		4	1						4			
Taylor						1	2		2	5		1										
Trempealeau										1					1						1	
Vernon							1			1									1			
Vilas						2				2												
Walworth						8				3		4					1					
Washburn										2												
Washington		1				3				1					1				1			
Waukesha	1				1	25	1			5		2							8		2	1
Waupaca	4					19				8									1			
Waushara						1				2												
Winnebago	1					48				18									10		1	
Wood						14	1			12					1							
Total	46	16	6	7	18	909	56	2	19	478	2	135	20	9	23	0	12	0	287	1	43	23

TABLE No. 17—SHOWING DIVORCES IN WISCONSIN BY CORDING TO SEX, NATIVITY, PLACE OF MARRIAGE

Causes	Sex of Complainant	Number of Divorces	Nativity of Plaintiff			Nativity of Defendant			Place of Marriage				Gainful Occupation	Case Contested
			Native Born	Foreign Born	Unknown	Native Born	Foreign Born	Unknown	Wisconsin	United States	Foreign Countries	Unknown		
Adultery	Total	47	35	9	3	35	9	3	17	26	3	1	1	5
	Male	30	22	7	1	12	3	2	...	...	...	...	...	....
	Female	17	13	2	2	23	6	1	...	...	...	...	...	....
Adultery and cruelty	Total	15	13	1	1	11	3	1	11	4	...	...	2	4
	Male	12	10	1	1	3	...	...	...	...	...	...	...	....
	Female	3	3	...	...	8	3	1	...	...	...	...	...	....
Adultery, cruelty and non-support	Total	6	6	...	...	6	...	...	4	2	...	...	1	....
	Male	...	...	...	...	6	...	...	...	...	...	...	...	....
	Female	6	6	...	...	...	...	...	...	...	...	...	...	....
Adultery and desertion	Total	7	5	2	...	4	2	1	3	3	1	...	...	1
	Male	5	3	2	...	1	1	...	...	...	...	...	...	....
	Female	2	2	...	...	3	1	1	...	...	...	...	...	....
Bigamy	Total	18	13	3	2	12	3	3	7	11	...	...	4	....
	Male	7	5	2	...	7	1	3	...	...	...	...	...	....
	Female	11	8	1	2	5	2	...	...	...	...	...	...	....
Cruel and inhuman treatment	Total	906	658	148	100	602	186	18	589	274	35	8	150	170
	Male	206	148	34	24	453	150	97	...	...	...	...	...	....
	Female	700	510	114	76	149	36	21	...	...	...	...	...	....
Cruelty and desertion	Total	56	41	13	2	40	11	5	38	15	2	1	7	10
	Male	25	16	8	1	23	4	4	...	...	...	...	...	....
	Female	31	25	5	1	17	7	1	...	...	...	...	...	....
Cruelty, desertion and drunkenness	Total	2	1	1	...	...	2	...	1	...	1	...	1	....
	Male	...	...	...	...	...	2	...	...	...	...	...	...	....
	Female	2	1	1	...	...	...	...	...	...	...	...	...	....
Cruelty, desertion and non-support	Total	17	13	2	2	12	3	2	6	9	1	1	6	....
	Male	...	...	...	...	12	3	2	...	...	...	...	...	....
	Female	17	13	2	2	...	...	...	...	...	...	...	...	....
Desertion	Total	480	315	107	58	305	107	68	247	186	40	7	60	23
	Male	260	161	69	30	135	50	35	...	...	...	...	...	....
	Female	220	154	38	28	170	57	33	...	...	...	...	...	....
Desertion and drunkenness	Total	2	1	1	...	1	1	...	1	1	...	...	1	....
	Male	1	1	...	...	...	1	...	...	...	...	...	...	....
	Female	1	...	1	...	1	...	...	...	...	...	...	...	....
Desertion and non-support	Total	134	105	18	11	93	26	15	75	53	6	...	55	4
	Male	...	...	...	...	93	26	15	...	...	...	...	...	....
	Female	134	105	18	11	...	...	...	...	...	...	...	...	....
Drunkenness	Total	19	14	5	...	15	4	...	11	7	1	...	4	2
	Male	2	1	1	...	14	3	...	...	...	...	...	...	....
	Female	17	13	4	...	1	1	...	...	...	...	...	...	....
Drunkenness and non-support	Total	9	6	3	...	7	2	...	3	6	...	...	6	....
	Male	...	...	...	...	7	2	...	...	...	...	...	...	....
	Female	9	6	3	...	...	...	...	...	...	...	...	...	....
Fraud in marriage	Total	23	16	6	1	16	3	4	6	17	...	...	2	2
	Male	17	10	6	1	4	1	1	...	...	...	...	...	....
	Female	6	6	...	...	12	2	3	...	...	...	...	...	....
Insanity	...	...	...	...	...	...	...	...	...	...	...	...	...	....
	...	...	...	...	...	...	...	...	...	...	...	...	...	....
	...	...	...	...	...	...	...	...	...	...	...	...	...	....

CAUSE FROM OCT. 1, 1920, TO SEPT. 30, 1921, ARRANGED AC-
NUMBER OF CHILDREN AND DURATION OF MARRIAGE

Alimony		Number of Children in Family												Duration of Marriage							
Alimony Asked	Alimony Granted	No Children	1	2	3	4	5	6	7	8	9	10+	Not Stated	Under 6 Months	Under 1 Year	1–4	5–9	10–19	20–29	30+	Not Stated
14	14	19	14	9	2	1	....	....	....	1	....	1	....	....	4	15	11	15	1	1	....
7	5	6	2	3	2	....	....	1	....	....	....	....	1	....	....	2	7	3	1	1	1
3	2	4	1	1	....	....	....	....	....	....	....	....	....	....	....	3	3	....	....	....	....
1	1	2	3	....	1	1	....	....	....	....	....	....	....	....	....	3	....	4	....	....	....
2	3	14	3	....	....	1	....	....	....	....	....	....	....	2	2	9	4	....	1	....	....
491	491	412	184	150	57	43	22	9	9	6	....	4	10	19	54	296	252	172	83	27	3
17	20	27	8	8	5	4	....	1	....	....	1	....	2	2	1	10	16	22	3	2	....
1	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	....
9	9	1	4	6	2	2	....	1	....	1	....	....	....	....	....	4	....	9	2	2	....
91	115	244	112	57	21	18	11	3	4	2	1	2	5	....	2	141	138	130	45	22	2
....	1	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....
53	48	59	37	24	5	1	2	1	1	....	....	....	4	1	2	34	45	38	11	3	....
13	12	8	4	3	1	1	....	2	....	....	....	....	....	....	....	....	9	7	1	1	1
5	2	6	....	1	2	....	....	....	....	....	....	....	....	....	....	2	3	3	....	....	....
2	8	19	4	....	....	....	....	....	....	....	....	....	....	2	6	10	4	1	....	....	....

TABLE NO. 17—

Causes	Sex of Complainant	Number of Divorces	Nativity of Plaintiff			Nativity of Defendant			Place of Marriage				Unlawful Occupation	Case Contested
			Native Born	Foreign Born	Unknown	Native Born	Foreign Born	Unknown	Wisconsin	United States	Foreign Countries	Unknown		
Imprisonment	Total	11	8	2	1	4	5	2	7	2	2	....	4	....
	Male	2	1	1	....	3	4	2	....	....	....	....	....	....
	Female	9	7	1	1	1	1	....	....	....	....	....	....	....
Impotency	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	....	....	....	....	....	....	....	....	....	....	....	....	....	....
	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Non-support	Total	299	231	33	29	220	41	32	171	116	6	....	111	26
	Male	....	....	....	....	220	41	32	....	....	....	....	....	....
	Female	299	231	33	29	....	....	....	....	....	....	....	....	....
Refusal to cohabit	Total	1	1	....	....	1	....	....	1	....	....	....	....	....
	Male	1	1	....	....	....	....	....	....	....	....	....	....	....
	Female	....	....	....	....	1	....	....	....	....	....	....	....	....
Voluntary separation	Total	43	31	11	1	30	9	4	25	13	5	....	7	2
	Male	28	22	5	1	7	7	1	....	....	....	....	....	....
	Female	15	9	6	....	23	2	3	....	....	....	....	....	....
Other causes or cause not stated	Total	28	18	4	1	16	4	3	15	8	....	....	2	6
	Male	10	8	2	....	6	4	3	....	....	....	....	....	....
	Female	13	10	2	1	10	....	....	....	....	....	....	....	....
	Total	2112	1531	369	212	1430	421	261	1238	753	103	18	424	255

Continued

Alimony		Number of Children in Family												Duration of Marriage							
Alimony Asked	Alimony Granted	No Children	1	2	3	4	5	6	7	8	9	10+	Not Stated	Under 6 Months	Under 1 Year	1–4	5–9	10–19	20–29	30+	Not Stated
3	6	7	3	....	1	....	....	....	....	....	....	....	....	....	1	4	3	3	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
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166	148	132	68	42	16	12	7	7	3	2	1	1	2	4	16	96	74	67	23	9	1
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3	11	19	6	7	4	3	1	1	....	1	....	....	1	....	....	1	5	16	15	6	....
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8	12	15	3	2	1	2	....	....	....	....	....	....	....	....	2	9	2	7	3	....	....
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....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
889	908	995	457	313	123	89	43	26	17	13	3	8	25	30	90	63	579	497	195	74	8

DEATHS

The total deaths reported to the board for the calendar year of 1920 was 29,859, exclusive of stillbirths. This corresponds to an annual death rate of 11.3 per thousand gross estimated population. The death rates by counties shown in Table No. 2 are the crude death rates, no allowance being made for differences in sex, age and race distribution of the population, nor for deaths in the counties of nonresidents. The relative healthfulness, therefore, of the various counties should not be based entirely on the death rate as given in Table No. 2 for 1920 and Table No. 3 for 1921.

During 1920 the general death rates for the 34 registration states was 13 per thousand population, which is slightly lower than the rate for 1919. The states having the highest rates in 1920 are Vermont, 15.7; Maine, 15.4; New Hampshire, 15.2; Maryland, 14.7, and Delaware 14.6. Those having the lowest rates are Montana, 9.5; Nebraska, 10; Minnesota, 10.7; Washington, 11.1; and Wisconsin, 11.3. This shows that Wisconsin, for the calendar year of 1920, had the fifth lowest death rate of all the registration states.

For 1921 the board received reports of 27,674 deaths, exclusive of stillbirths. This represents an annual death rate of 10.3 per thousand estimated population. The 1921 death rate in Wisconsin is the lowest death rate we have ever had since Wisconsin became a registration state in 1908. Comparative figures for other registration states are not yet available.

Table No. 1, which shows total deaths reported from all important communicable diseases and other causes of death for the period from 1914 to 1921, inclusive, shows an increase in the number of deaths reported from scarlet fever, whooping cough, diphtheria, cancer, apoplexy, heart disease and puerperal septicemia.

Table No. 18 shows total deaths by counties for the calendar year of 1920 arranged according to color, sex, conjugal condition and age groups.

Table No. 19 is a tabulation of total deaths reported by counties for 1921 arranged according to color, sex, conjugal condition and age groups.

Table No. 20 is a tabulation of deaths for each county arranged according to the cause of death for the calendar years of 1920 and 1921. On account of changes in the international classification of causes of death, which was made in 1921, the deaths reported from certain diseases for each of the two years covered by this report are not comparable. The following changes in tabulation should be noted. In 1920, when we followed the old classification, deaths from acute anterior poliomyelitis were classified under "diseases of the spinal cord." Beginning with 1921 acute anterior poliomyelitis is

to be classified as a separate disease. It is for this reason that, according to the table, there would appear to be no deaths from poliomyelitis for the calendar year of 1920. The distribution of deaths from this disease for 1920 is fully discussed under the subject of communicable diseases. In 1920 deaths from lethargic encephalitis were credited to "diseases of the nervous system" or "influenza." We now have a separate tabulation for this disease also. Starting with 1921 we also have a separate tabulation of deaths from meningococcus meningitis. Prior to this time this disease was credited to either "simple" or "cerebro spinal meningitis." Under diseases of the digestive system we now have a separate tabulation of deaths due to "diseases of the pancreas." Prior to 1921 these diseases were classified under "other diseases of the digestive system." Deaths from congenital debility, icterus and sclerema prior to 1921 were grouped under the general title "premature births." Deaths from these causes are now given a separate classification.

Table No. 21 shows deaths reported in cities for the calendar year of 1920 arranged according to certain age groups and certain important causes of death.

Table No. 22 shows total deaths reported in cities for the calendar year of 1921 classified according to certain age groups and certain important causes of death.

Tables No. 23, 24, 25 and 26 show infant mortality rates for the rural counties, for the rural portions of counties containing cities of 10,000 population or more and for cities having 10,000 or more population for the calendar years of 1920 and 1921.

TYPHOID FEVER DEATH RATES

The death rate from typhoid fever in Wisconsin has steadily declined since 1910, although there is a slight increase in the total deaths reported for 1921 as compared with 1920. The death rate from typhoid fever in Wisconsin per hundred thousand population has declined from 13.1 in 1911 to 2.5 in 1920. The rate for the entire registration area has declined from 21 per hundred thousand in 1911 to 7.8 per hundred thousand in 1920. The census tabulation showing the urban and rural death rates from typhoid fever reveals the fact that the rural rate both in Wisconsin and in the entire registration area is uniformly higher and often nearly twice as high as the city rate. The death rate from typhoid fever in cities per hundred thousand population has declined from 18.7 in 1911 to 5.5 in 1920, while the rural rate in the registration area was 22.2 in 1911 and 9.6 per hundred thousand population in 1920. This discrepancy in the urban and rural rates is due almost entirely to adequately protected water supplies and sewer systems in the larger cities, while the rural districts and the small towns and villages do not have these sanitary safeguards.

MEASLES DEATH RATES

The death rate from measles in Wisconsin varies from 10.7 per hundred thousand in 1911 to 8.8 per hundred thousand in 1920. The rate for the entire registration area was 10 per hundred thousand in 1911 and is 8.8 per hundred thousand in 1920.

SCARLET FEVER DEATH RATES

The scarlet fever death rate in Wisconsin ranges from 9.3 per hundred thousand in 1911 to 9.7 per hundred thousand population in 1920, while the rate for the entire registration area varies from 8.6 per hundred thousand in 1911 to 4.6 per hundred thousand in 1920. Our rate is considerably higher than the average for the registration area and is due in part to the very mild type of the disease which we have been having for a number of years. The disease in most localities has been of such a mild form that physicians in many cases were not called and the nature of the ailment was not determined until a virulent type of the disease developed, often resulting in the death of the patient. Parents are urged to call the family physician at once if an eruptive disease appears where the nature of the ailment is not clearly understood. If parents have reason to suspect that the rash or other eruption is of a communicable nature it is their duty to report the case at once to the local health officer even though a physician is not employed.

WHOOPING COUGH DEATH RATES

The death rate from whooping cough ranges from 8.7 per hundred thousand population in 1911 to 11.3 in 1920, while the rate for the entire registration area varies from 11.3 in 1911 to 12.5 in 1920.

DIPHTHERIA DEATH RATES

The death rate from diphtheria in Wisconsin ranges from 13.9 per hundred thousand population in 1911 to 14.5 in 1920. For the entire registration area, comprised of 34 states the death rate from diphtheria in 1911 was 18.9 per hundred thousand and 15.3 in 1920. The rural death rates from diphtheria are uniformly lower than the urban rates.

It is very evident from the above figures that the death rate from diphtheria in Wisconsin and in the registration area has not declined within recent years in spite of the fact that antitoxin is now generally recognized as an almost absolute cure for the disease if used in the early stages. The use of toxin antitoxin to immunize persons who are susceptible to diphtheria gives great promise of materially reducing the death rate from this disease if generally applied. The deaths reported from diphtheria in 1920 for the entire registration area number 13,395 and corresponds to an annual death rate of 15.3 per hundred thousand population. In 1900 the death rate from diphtheria in the registration area was 43.3 per hundred thousand population. If we can assume that these figures measure the reduction in

the death rate from this cause in the United States since 1900, then in round numbers there is a saving of about 30,000 lives in 1920 to be credited to the advancement made in the treatment and prevention of diphtheria.

INFLUENZA DEATH RATES

During the winter of 1920 we had in Wisconsin a very severe epidemic of influenza. This outbreak was not so fatal as the epidemic during the fall of 1918, but produced a mortality practically equal to the outbreak during 1919. There were 2,107 deaths reported from influenza during 1920 and only 206 deaths from this disease during 1921. The death rate from influenza in Wisconsin per hundred thousand population ranges from 12.8 in 1911, to 242.5 in 1918, 84.3 in 1919 and 65.2 in 1920. For the entire registration area the rate varies from 15.7 in 1911 to 300.8 in 1918, 98.8 in 1919 and 71 per hundred thousand in 1920.

TUBERCULOSIS DEATH RATES

The death rate from tuberculosis in Wisconsin per hundred thousand population has declined from 103.3 in 1911, to 85.6 in 1920. For the entire registration area the rate has declined from 159.2 in 1911 to 114.2 in 1920. If Wisconsin had the same death rate from tuberculosis for 1920 as the average for the registration area we would have recorded 3,004 deaths from tuberculosis instead of 2,243. This represents a saving of 761 valuable human lives which otherwise would have been sacrificed to this easily preventable disease.

PNEUMONIA DEATH RATES

All forms of pneumonia in Wisconsin were responsible for 2,901 deaths in 1920 and 2,093 deaths in 1921. The death rate from pneumonia in Wisconsin per hundred thousand population varied from 85.3 in 1911 to 112.9 per hundred thousand population in 1920. The pneumonia death rate for the registration area ranged from 133.9 in 1911 to 137.3 in 1920. For cities in the registration area the pneumonia death rate ranged from 154.2 per hundred thousand in 1911 to 168.5 in 1920. For the rural part of the registration states the pneumonia death rate varied from 105 per hundred thousand in 1911 to 107 per hundred thousand in 1920. The rural death rate from pneumonia for each of the ten years included in this study is considerably lower than the urban death rate.

DEATH RATES FROM DIARRHEA AND ENTERITIS UNDER TWO YEARS OF AGE

In Wisconsin the death rate from diarrheal diseases among young children has steadily declined from 51 per hundred thousand population in 1911 to 28.2 in 1920. For the registration area the rate has steadily declined from 77.5 in 1911 to 44 per hundred thousand in

1920. The rural death rate is considerably lower than the urban rate. That diarrheal diseases among young children is still an important cause of death is proven by the fact that for the registration area in 1920, 38,514 children under two years of age died from this cause. For the entire registration area the death rate from diarrheal diseases among young children has been markedly reduced within recent years. For 1900 the rate was 108.8 per hundred thousand population for the registration area. This marked reduction in the number of deaths from diarrheal diseases among young children is due largely to measures now employed to prevent the loss of child life, particularly the educational campaign which has been carried on among the parents relative to proper methods of feeding and caring for young children.

DEATH RATES FROM PUERPERAL CAUSES

The question of whether deaths from puerperal causes are increasing or decreasing in Wisconsin cannot be definitely determined without accurate reports of births and complete records of puerperal deaths for a series of years. The death rate from puerperal causes to be reasonably accurate must be based on the number of such deaths occurring per thousand births or the number of such deaths per thousand live births. In Wisconsin the death rate from puerperal causes per thousand live births was 5.7 in 1917; 5.1 in 1918; 4.6 in 1919 and 5.7 in 1920. For the birth registration area during these same years, which comprises reports from twenty-four registration states the death rate from puerperal causes per thousand live births was 6.6 in 1917; 9.2 in 1918; 7.4 in 1919; and 8 in 1920. The following table shows total births, total deaths from puerperal causes and death rates per thousand live births in Wisconsin for the period from 1908 to 1921 inclusive.

TABLE SHOWING DEATHS AND DEATH RATES FROM PUERPERAL CAUSES

Year	Total Births Reported	Total Deaths from Puerperal Causes	Death Rate Per 1,000 Births
1908	52,994	304	5.7
1909	51,212	231	4.5
1910	52,261	255	4.9
1911	52,653	296	5.6
1912	54,493	237	4.3
1913	55,237	255	4.6
1914	58,163	307	5.3
1915	58,014	291	5.0
1916	59,459	327	5.5
1917	59,013	334	5.7
1918	60,649	311	5.1
1919	55,099	256	4.6
1920	59,269	338	5.7
1921	62,163	352	5.7

TABLE No. 18—SHOWING DEATHS BY COUNTIES DURING THE CALENDAR YEAR OF 1920, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITION AND AGE GROUPS

Counties	Total	Color				Sex		
		White	Black	Indian	Unknown	Male	Female	Unknown
Adams	75	75				43	32	
Ashland	330	292		38		200	130	
Barron	345	345				188	157	
Bayfield	126	106		20		66	60	
Brown	849	834		15		449	400	
Buffalo	132	132				73	59	
Burnett	90	89		1		59	31	
Calumet	147	146		1		74	73	
Chippewa	478	478				253	225	
Clark	270	269		1		137	133	
Columbia	328	324		4		169	159	
Crawford	164	164				80	84	
Dane	1,041	1,039	1	1		549	491	1
Dodge	464	462	2			220	244	
Door	163	163				87	76	
Douglas	524	522	2			300	224	
Dunn	275	275				141	134	
Eau Claire	522	521		1		275	247	
Florence	27	27				12	15	
Fond du Lac	694	694				363	331	
Forest	69	63	1	5		37	32	
Grant	432	432				221	210	1
Green	248	248				128	120	
Green Lake	152	152				78	74	
Iowa	243	243				132	111	
Iron	88	88				55	33	
Jackson	189	187		2		110	79	
Jefferson	375	375				191	184	
Juneau	176	176				91	85	
Kenosha	531	530	1			298	233	
Kewaunee	166	166				98	68	
La Crosse	616	616				321	295	
Lafayette	184	184				92	92	
Langlade	184	184				90	94	
Lincoln	193	193				105	88	
Manitowoc	597	596		1		322	275	
Marathon	639	639				354	285	
Marinette	350	350				194	155	1
Marquette	72	72				42	30	
Milwaukee	7,056	7,001	51	4		3,845	3,211	
Monroe	291	286		5		150	141	
Oconto	257	257				147	110	
Oneida	133	132		1		79	54	
Outagamie	622	609		13		348	274	
Ozaukee	204	204				94	110	
Pepin	73	73				40	33	
Pierce	187	187				105	82	
Polk	237	236		1		125	112	
Portage	384	384				209	175	
Price	119	119				74	45	
Racine	949	949				480	469	
Richland	184	184				90	94	
Rock	906	891	15			456	450	
Rusk	143	143				79	64	
St. Croix	274	274				160	114	

TABLE NO. 18—Continued

Counties	Total	Color				Sex		
		White	Black	Indian	Unknown	Male	Female	Unknown
Sauk	380	379	1	.....	.....	197	183	.....
Sawyer	67	55	.....	12	.....	33	34	.....
Shawano	356	309	1	46	.....	194	162	.....
Sheboygan	636	636	.....	.....	.....	342	294	.....
Taylor	131	131	.....	.....	.....	67	64	.....
Trempealeau	266	265	.....	1	.....	140	126	.....
Vernon	279	279	.....	.....	.....	149	130	.....
Vilas	62	50	.....	12	.....	28	34	.....
Walworth	354	354	.....	.....	.....	179	175	.....
Washburn	76	76	.....	.....	.....	46	30	.....
Washington	287	287	.....	.....	.....	152	135	.....
Waukesha	579	579	.....	.....	.....	316	263	.....
Waupaca	399	399	.....	.....	.....	219	180	.....
Waushara	151	151	.....	.....	.....	84	67	.....
Winnebago	881	880	.....	1	.....	470	411	.....
Wood	388	383	.....	5	.....	222	166	.....
Total	29,859	29,593	75	191	.....	16,016	13,840	3

TABLE NO. 18—Continued

Counties	Conjugal Condition					Age Grouping															
	Single	Married	Widowed	Divorced	Unknown	Under 1 day	Under 1 mo.	Under 1 yr.	1-4	5-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	Age Not Stated
Adams	22	30	22	.....	1	3	2	4	3	1	3	8	4	4	8	14	10	11	.....	.....	.....
Ashland	161	121	39	3	6	18	7	28	19	13	20	19	38	34	31	50	31	17	5	.....	.....
Barron	130	143	69	2	1	24	15	26	17	12	10	28	24	19	37	45	62	32	4	.....	.....
Bayfield	72	40	14	.....	.....	7	9	19	12	1	8	9	8	6	14	14	14	5	.....	.....	.....
Brown	364	311	165	3	6	42	44	90	49	13	44	52	65	48	67	105	127	89	12	1	1
Buffalo	42	52	36	2	.....	6	4	8	7	2	1	8	4	9	6	13	35	20	8	1	.....
Burnett	38	35	15	2	.....	4	6	3	6	3	4	6	5	7	5	11	17	10	1	1	1
Calumet	57	52	38	.....	.....	11	5	5	9	5	2	10	14	9	12	15	24	24	2	.....	.....
Chippewa	230	161	83	2	2	18	8	20	26	21	57	51	46	20	42	58	64	39	8	.....	.....
Clark	91	126	51	2	.....	10	11	20	10	5	14	20	21	13	25	36	48	32	5	.....	.....
Columbia	106	146	76	.....	.....	11	9	6	11	4	13	34	17	21	35	58	62	40	7	.....	.....
Crawford	54	61	48	.....	1	14	10	4	5	3	7	8	10	7	21	20	21	23	10	.....	1
Dane	342	465	219	14	1	39	26	37	25	22	43	84	92	97	122	142	161	131	18	1	1
Dodge	164	182	110	4	4	12	14	32	23	5	18	37	22	28	54	63	70	68	15	1	2
Door	62	61	38	2	.....	13	13	12	3	3	3	10	8	12	8	20	36	19	3	.....	.....
Douglas	265	175	78	5	1	32	15	44	40	17	32	47	48	36	71	67	52	18	5	.....	.....
Dunn	89	121	63	2	.....	15	15	15	8	3	11	14	11	17	20	42	64	31	9	.....	.....
Eau Claire	192	214	109	7	.....	20	17	33	20	13	25	53	29	34	64	87	70	46	11	.....	.....
Florence	14	7	6	.....	.....	1	1	3	3	1	3	2	2	.....	3	1	6	.....	.....	.....	1
Fond du Lac	263	282	139	5	5	36	32	38	29	13	31	48	47	45	72	99	113	75	15	1	.....
Forest	42	22	4	.....	1	8	3	7	9	5	1	8	7	4	4	2	8	1	1	.....	1
Grant	152	177	100	3	.....	22	13	16	16	10	22	27	29	25	39	69	86	46	12	.....	.....
Green	76	108	61	1	2	12	6	7	8	2	7	23	22	15	24	37	44	35	5	.....	1
Green Lake	44	62	44	2	.....	6	3	6	6	3	2	10	8	9	16	13	35	30	4	1	.....
Iowa	83	96	61	2	1	4	10	8	11	3	9	20	11	12	30	34	46	33	11	1	.....

TABLE NO. 18—Continued

Counties	Conjugal Condition					Age Grouping															
	Single	Married	Widowed	Divorced	Unknown	Under 1 day	Under 1 mo.	Under 1 yr.	1-4	5-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	Age Not Stated
Iron	57	22	5	.....	4	8	4	7	12	6	6	8	10	8	5	9	3	2	.....	.....	.....
Jackson	66	78	43	2	.....	5	9	7	7	8	14	15	14	7	16	24	30	27	6	.....	.....
Jefferson	156	124	92	3	.....	9	10	17	15	7	12	18	28	17	44	68	60	63	7	.....	.....
Juneau	59	73	43	1	.....	6	7	10	9	2	8	8	17	6	15	30	39	15	4	.....	.....
Kenosha	253	206	63	8	1	26	34	62	49	24	19	51	61	44	32	58	42	23	6	.....	.....
Kewaunee	58	63	43	2	.....	7	7	8	11	8	4	7	5	6	12	21	34	29	7	.....	.....
La Crosse	231	246	132	6	1	24	27	24	14	14	23	48	51	55	77	104	95	53	7	.....	.....
La Favette	73	62	49	.....	.....	10	6	12	4	1	7	12	17	13	12	20	41	23	4	1	1
Langlade	81	76	26	.....	1	10	17	14	14	7	8	12	16	12	20	22	21	9	2	.....	.....
Lincoln	79	80	30	2	2	12	9	14	11	11	6	11	18	8	22	25	26	16	3	1	.....
Manitowoc	256	233	105	2	1	40	31	46	36	12	25	44	44	33	51	70	96	56	13	.....	.....
Marathon	278	247	104	7	3	39	39	63	39	15	33	41	53	27	60	77	84	66	3	.....	.....
Marinette	147	140	59	3	1	15	14	27	23	9	20	22	23	20	44	41	63	25	4	.....	.....
Marquette	20	27	25	.....	.....	4	3	1	1	1	2	4	2	3	6	6	17	19	3	.....	.....
Milwaukee	2,990	2,667	1,313	73	13	310	299	564	485	199	306	598	677	547	809	895	877	427	60	1	2
Monroe	112	99	72	6	2	14	17	27	11	4	12	18	12	13	21	49	53	33	7	.....	.....
Oconto	100	99	55	1	2	7	10	16	20	12	10	21	13	18	25	27	48	26	4	.....	.....
Oneida	71	38	21	2	1	9	6	5	11	5	11	13	11	10	14	17	8	11	2	.....	.....
Outagamie	248	262	109	3	.....	26	19	46	35	22	26	57	49	45	55	77	98	52	12	3	.....
Ozaukee	70	80	52	2	.....	8	6	8	18	1	9	12	10	9	17	32	37	33	4	.....	.....
Pepin	25	30	18	.....	.....	2	1	3	2	4	.....	9	8	5	3	8	15	13	.....	.....	.....
Pierce	54	73	57	3	.....	6	2	11	6	4	8	4	10	8	17	22	43	44	2	.....	.....
Polk	92	93	49	3	.....	13	15	19	6	2	13	19	16	7	25	28	36	31	7	.....	.....
Portage	154	154	73	3	.....	21	18	35	18	8	18	33	27	16	35	48	63	34	9	1	.....
Price	54	41	21	3	.....	4	6	13	15	3	4	8	7	10	10	12	10	16	1	.....	.....

Racine	410	367	162	7	3	27	37	74	68	32	42	81	82	79	102	106	119	86	13	.....	1
Richland	59	76	47	2	.....	9	6	15	6	2	9	8	11	9	13	29	39	25	3	.....	.....
Rock	315	360	209	14	8	36	24	37	45	20	45	76	70	69	93	124	144	106	15	1	1
Rusk	61	56	23	2	1	5	5	10	14	6	9	13	11	11	12	18	18	8	3	.....	.....
St. Croix	103	114	55	2	.....	15	12	15	15	5	13	13	20	18	25	46	33	38	6	.....	.....
Sauk	127	152	96	5	.....	15	16	17	14	11	13	22	27	22	24	52	72	64	10	.....	1
Sawyer	39	22	5	1	.....	7	9	3	6	1	8	2	1	6	7	3	7	5	.....	.....	2
Shawano	151	144	55	5	1	13	28	37	19	12	19	17	21	22	27	60	49	25	7	.....	.....
Sheboygan	257	238	138	2	1	23	25	55	38	23	25	29	41	46	71	85	88	73	12	1	1
Taylor	58	51	22	.....	.....	11	7	9	11	9	4	6	14	6	13	14	11	13	2	.....	1
Trempealeau	94	113	55	3	1	10	8	13	16	6	9	19	21	19	24	34	46	36	5	.....	.....
Vernon	103	106	65	5	.....	12	21	17	12	4	17	14	13	12	22	39	55	31	9	.....	1
Vilas	34	21	6	.....	1	1	4	14	6	3	1	5	5	4	5	6	3	5	.....	.....	.....
Walworth	97	149	106	1	1	13	10	7	11	4	11	14	21	25	26	59	80	63	10	.....	.....
Washburn	34	32	10	.....	.....	3	8	9	3	2	3	4	4	5	3	15	9	6	1	.....	1
Washington	103	113	70	.....	1	15	9	23	4	8	14	19	23	16	35	45	49	30	7	.....	.....
Waukesha	220	222	130	6	1	21	17	20	25	10	26	77	63	38	34	87	83	68	8	.....	2
Waupaca	105	155	133	5	1	15	12	17	14	7	13	11	16	20	31	50	102	78	11	2	.....
Waushara	55	50	43	3	.....	10	11	6	8	4	5	8	4	6	9	20	31	24	5	.....	.....
Winnebago	278	399	186	8	10	33	28	29	26	12	31	72	76	75	90	141	149	98	21	.....	.....
Wood	156	171	58	2	1	18	20	23	12	12	28	28	36	24	43	68	43	24	8	1	.....
Total	11,798	11,674	6,021	271	95	1,335	1,231	2,000	1,620	765	1,339	2,267	2,371	2,010	2,966	4,006	4,475	2,927	504	20	23

TABLE No. 19—SHOWING DEATHS BY COUNTIES DURING THE CALENAR YEAR OF 1921, ARRANGED ACCORDING TO COLOR, SEX, CONJUGAL CONDITIONS AND AGE GROUPS

Counties	Total	Color				Sex		
		White	Black	Indian	Unknown	Male	Female	Unknown
Adams	69	69				40	29	
Ashland	292	268		24		180	112	
Barron	356	356				190	165	1
Bayfield	108	96		12		65	43	
Brown	817	813	1	3		427	390	
Buffalo	130	130				68	62	
Burnett	94	92		2		52	42	
Calumet	144	144				84	60	
Chippewa	397	395		2		215	182	
Clark	269	269				151	118	
Columbia	330	328		2		172	158	
Crawford	146	146				69	77	
Dane	960	957	3			492	467	1
Dodge	466	466				258	208	
Door	220	220				110	110	
Douglas	494	491	2	1		277	217	
Dunn	252	251	1			142	110	
Eau Claire	434	434				238	196	
Florence	27	27				17	10	
Fond du Lac	616	615	1			318	298	
Forest	73	72		1		44	29	
Grant	413	413				208	204	1
Green	252	252				131	121	
Green Lake	173	173				95	78	
Iowa	249	249				121	128	
Iron	79	79				42	37	
Jackson	168	165		3		76	92	
Jefferson	408	407	1			224	184	
Juneau	188	186		2		106	82	
Kenosha	428	427	1			234	194	
Kewaunee	160	160				80	80	
La Crosse	667	667				378	289	
Lafayette	181	181				100	81	
Langlade	210	209		1		118	92	
Lincoln	201	201				115	86	
Manitowoc	533	533				267	266	
Marathon	620	620				328	292	
Marinette	324	324				189	135	
Marquette	87	87				44	43	
Milwaukee	5,952	5,912	38	2		3,222	2,730	
Monroe	309	306		3		176	133	
Oconto	243	243				133	110	
Oneida	154	152	1	1		87	67	
Outagamie	580	563	1	16		295	285	
Ozaukee	167	167				96	71	
Pepin	77	77				39	38	
Pierce	211	210	1			108	103	
Polk	215	211		4		119	96	
Portage	372	372				200	172	
Price	149	149				99	50	
Racine	804	803	1			430	374	
Richland	223	223				130	93	
Rock	678	676	2			354	323	1
Rusk	113	113				59	54	
St. Croix	239	239				138	101	

TABLE NO. 19—Continued

Counties	Total	Color				Sex		
		White	Black	Indian	Unknown	Male	Female	Unknown
Sauk	316	316	.....	.....	.....	168	148	.....
Sawyer	50	50	.....	.....	.....	33	17	.....
Shawano	345	294	.....	51	.....	173	172	.....
Sheboygan	611	610	.....	1	.....	314	297	.....
Taylor	127	127	.....	.....	.....	76	51	.....
Trempealeau	227	227	.....	.....	.....	117	110	.....
Vernon	255	255	.....	.....	.....	127	128	.....
Vilas	70	51	.....	19	.....	47	23	.....
Walworth	347	347	.....	.....	.....	180	167	.....
Washburn	78	78	.....	.....	.....	39	39	.....
Washington	284	284	.....	.....	.....	155	129	.....
Waukesha	586	583	1	2	.....	336	250	.....
Waupaca	432	432	.....	.....	.....	237	195	.....
Waushara	153	153	.....	.....	.....	87	66	.....
Winnebago	878	878	.....	.....	.....	482	396	.....
Wood	394	391	.....	3	.....	203	191	.....
Total	27,674	27,464	55	155	.....	14,924	12,746	4

TABLE NO. 19—Continued

Counties	Conjugal Condition					Age Grouping															
	Single	Married	Widowed	Divorced	Unknown	Under 1 day	Under 1 mo.	Under 1 yr.	1-4	5-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	Age Not Stated
Adams	26	26	15	2	.....	2	6	6	2	1	3	3	2	7	7	12	9	9	.....	.....	.....
Ashland	141	118	32	1	.....	11	23	16	12	8	20	27	19	28	40	53	24	10	.....	.....	1
Barron	138	135	78	5	.....	16	21	21	19	8	20	31	26	17	36	41	63	29	7	.....	1
Bayfield	43	44	19	1	1	4	4	9	6	2	4	10	4	9	11	20	13	8	3	1	.....
Brown	337	351	120	8	1	31	49	67	34	22	40	67	67	70	79	100	113	63	14	.....	1
Buffalo	44	50	35	1	.....	6	12	4	6	2	3	6	4	7	10	18	23	27	2	.....	.....
Burnett	38	29	25	2	.....	4	5	7	6	2	3	4	5	5	6	13	16	12	1	.....	.....
Calumet	56	57	31	.....	.....	11	7	13	9	1	6	7	5	11	10	19	23	18	4	.....	.....
Chippewa	179	135	80	2	1	11	13	19	16	12	44	34	29	34	36	48	64	31	4	.....	2
Clark	106	91	72	.....	.....	9	16	20	19	9	14	10	11	11	19	31	55	39	6	.....	.....
Columbia	94	136	93	3	4	11	8	9	8	4	8	12	18	25	44	68	55	49	11	.....	.....
Crawford	46	58	40	1	1	13	5	6	1	5	6	6	7	6	11	35	16	22	7	.....	.....
Dane	318	390	239	11	2	40	30	30	36	18	29	66	77	82	110	165	151	97	26	2	1
Dodge	143	191	123	6	3	22	24	21	10	8	14	22	20	29	39	65	92	81	18	1	.....
Door	76	86	56	1	1	10	12	12	15	8	12	4	10	12	16	33	48	23	5	.....	.....
Douglas	240	189	59	3	3	27	24	36	25	12	39	33	43	48	67	56	63	17	2	.....	2
Dunn	95	95	60	2	.....	17	14	10	6	10	13	14	13	17	21	32	49	31	5	.....	.....
Eau Claire	134	193	101	6	.....	15	24	14	11	11	16	26	26	28	43	80	85	44	10	1	.....
Florence	10	14	2	1	.....	1	1	3	2	.....	.....	2	1	3	2	3	2	6	1	.....	.....
Fond du Lac	231	246	132	4	3	35	25	30	20	17	23	40	30	41	60	103	98	76	17	1	.....
Forest	38	29	6	.....	.....	7	6	11	4	3	4	6	5	3	5	12	4	3	.....	.....	.....
Grant	111	196	100	6	.....	15	15	12	12	6	10	16	23	21	40	72	81	79	11	.....	.....
Green	82	108	60	.....	2	6	12	18	5	6	10	15	11	20	15	37	64	25	7	.....	1
Green Lake	52	74	46	1	.....	5	10	6	3	2	6	16	8	9	11	19	38	35	5	.....	.....
Iowa	91	89	67	2	.....	13	20	11	8	4	3	8	10	13	21	46	44	34	13	1	.....
Iron	43	31	4	1	.....	5	7	7	6	3	3	6	7	13	7	4	3	6	2	.....	.....
Jackson	60	65	43	.....	.....	8	5	15	6	5	11	6	6	5	17	21	35	25	3	.....	.....
Jefferson	142	152	108	5	1	11	15	18	6	6	21	22	30	29	33	68	83	49	16	1	.....
Juneau	62	79	45	2	.....	8	10	9	10	4	3	7	3	14	20	38	29	25	8	.....	.....
Kenosha	194	160	67	2	5	30	25	27	32	15	16	30	41	43	49	46	37	32	5	.....	.....

Kewaunee	50	57	52	1	.....	4	6	10	8	3	6	6	10	4	17	17	28	33	7	1	.....
La Crosse	242	272	144	6	3	27	32	31	23	11	26	48	50	55	74	107	92	67	20	2	2
Lafayette	74	73	32	2	.....	4	12	10	12	8	6	9	4	14	15	33	32	19	3	.....	.....
Langlade	95	77	34	3	1	18	14	15	8	5	11	13	14	24	14	30	29	13	1	.....	1
Lincoln	78	82	41	.....	.....	14	13	13	8	8	8	8	15	15	24	22	27	22	3	.....	1
Manitowoc	216	208	105	1	3	30	36	40	21	11	20	42	22	31	47	86	78	59	9	.....	1
Marathon	279	232	106	2	1	42	47	49	33	20	36	41	45	42	55	75	84	45	6	.....	.....
Marinette	100	147	70	3	4	12	17	33	24	5	14	19	17	20	37	39	43	37	6	.....	1
Marquette	29	31	27	.....	.....	1	5	4	1	1	6	7	3	2	5	17	17	15	3	.....	.....
Milwaukee	2,448	2,225	1,194	73	12	311	310	411	369	179	206	408	474	519	689	820	790	398	64	2	2
Monroe	120	110	74	1	4	19	11	26	14	8	14	13	13	10	27	42	66	38	7	1	.....
Oconto	112	86	42	3	.....	10	19	36	10	9	12	10	6	13	17	34	40	26	1	.....	.....
Oneida	70	63	15	3	3	10	5	16	5	.....	8	7	11	17	21	27	19	7	1	.....	.....
Outagamie	234	238	108	.....	.....	26	38	59	24	16	29	34	28	33	49	78	78	79	9	.....	.....
Ozaukee	42	68	56	.....	1	4	10	5	6	4	5	5	7	7	26	21	40	23	4	.....	.....
Pepin	28	24	25	.....	.....	5	4	2	1	3	6	4	3	4	8	9	12	14	2	.....	.....
Pierce	61	87	61	2	.....	14	10	11	1	2	6	11	7	9	15	34	49	34	7	.....	1
Polk	77	84	51	3	.....	12	11	14	13	6	11	9	7	13	16	27	34	35	7	.....	.....
Portage	172	128	70	2	.....	32	20	37	27	18	13	20	19	19	28	35	59	39	6	.....	.....
Price	65	57	25	1	1	6	16	11	10	4	6	5	17	16	11	17	15	14	1	.....	.....
Racine	341	295	153	6	9	30	43	60	54	38	36	42	57	59	76	109	123	69	7	.....	1
Richland	77	97	42	6	1	15	7	14	13	5	6	13	10	8	21	33	55	16	6	.....	1
Rock	232	296	145	5	.....	38	25	35	22	11	26	41	45	45	65	126	103	69	26	1	.....
Rusk	46	43	23	1	.....	9	6	9	5	4	4	8	8	12	7	19	17	4	1	.....	.....
St. Croix	87	93	55	3	1	14	8	14	7	6	5	23	9	19	21	36	33	37	6	1	.....
Sauk	98	127	89	2	.....	9	13	15	6	7	12	14	6	16	27	56	59	56	19	1	.....
Sawyer	27	13	6	.....	4	5	6	3	7	.....	2	.....	5	.....	2	7	9	1	2	.....	1
Shawano	146	113	76	4	6	21	23	36	21	11	17	13	19	9	25	51	53	42	3	1	.....
Sheboygan	221	219	159	10	2	25	31	36	26	22	21	29	35	33	72	89	106	74	12	.....	.....
Taylor	65	38	23	.....	1	9	15	9	15	5	5	6	5	2	9	18	13	15	1	.....	.....
Trempealeau	77	91	57	2	.....	6	8	12	12	5	11	15	12	9	12	40	44	32	9	.....	.....
Vernon	87	101	64	1	2	16	21	9	11	3	5	16	14	8	18	30	53	38	13	.....	.....
Vilas	34	16	17	2	1	2	4	7	2	5	3	3	5	7	4	11	10	4	3	.....	.....
Walworth	92	153	95	6	1	15	6	14	11	6	11	15	19	12	29	67	91	38	12	.....	1
Washburn	28	32	17	1	.....	2	5	8	1	2	4	2	4	5	6	9	13	10	6	.....	1
Washington	100	110	73	1	.....	11	15	13	11	9	9	11	17	15	23	39	65	42	4	.....	.....
Waukesha	207	228	140	8	3	17	21	22	24	14	18	42	51	43	56	98	112	55	10	1	2
Waupaca	121	176	134	.....	1	17	16	16	17	11	18	16	17	17	39	69	88	69	21	.....	1
Waushara	54	63	35	1	.....	2	5	8	11	5	9	7	6	8	11	20	36	19	6	.....	.....
Winnebago	264	372	228	8	6	41	27	44	19	14	28	39	69	61	93	155	173	95	20	.....	.....
Wood	164	145	78	5	2	25	17	29	21	16	25	26	20	26	37	60	56	30	5	1	.....
Total	10,530	10,787	5,999	257	101	1,334	1,406	1,733	1,289	734	1,133	1,656	1,766	1,941	2,733	4,070	4,424	2,837	572	20	26

TABLE No. 20—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH

County	Typhoid and Paratyphoid Fever			Typhus Fever			Relapsing Fever			Malta Fever			Malaria			Smallpox			Measles			Scarlet Fever			Whooping Cough			Diphtheria			Influenza		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams																			1		1	1		1					1	1	5	1	6
Ashland	4	3	7																1		1	4	2	6	9	2	11	5	1	6	36	3	39
Barron	1	1	2																	3	3	6	3	9	5	2	7		6	6	23	5	28
Bayfield	1		1																2		2				7		7	2	2	4	4		4
Brown		6	6													3		3	6	2	8	11	2	13	14	3	17	7	24	31	30	10	40
Buffalo																							1	1	2	1	3	2		2	7	1	8
Burnett																			1		1	5	6	11	1	1	2		1	1	6	1	7
Calumet																			1		1	1		1	1		1				20	1	21
Chippewa																			2		2	2	4	6	5	3	8	9	5	14	75	25	100
Clark		1	1																2	1	3	1	5	6	2	2	4	2	4	6	31	6	37
Columbia		1	1																1		1	2	2	4					1	1	24	7	31
Crawford																						2	1	3	2	4	6		1	1	12		12
Dane														1	1		1	1	1		1		2	2	10	1	11	6	13	19	76	6	82
Dodge																			3		3	1	2	3	11	2	13	5	1	6	31	2	33
Door		3	3																			3	4	7	1	1	2	1	4	5	4	1	5
Douglas	1	2	3																10		10	12	9	21	13	8	21	13	9	22	39	1	40
Dunn	1		1																2		2		4	4	3	1	4	1		1	22	4	26
Eau Claire		2	2																1		1	6	2	8	3	3	6	5	4	9	40	1	41
Florence																			2		2							2		2			
Fond du Lac	1	1	2																3		3	2	2	4	6		6	13	18	31	49		49
Forest																						1	2	3	4	3	7	3	1	4	8		8
Grant	1	1	2																	2	2		4	4	5	3	8	2	1	3	31		31
Green		2	2																3	1	4		3	3				1		1	23	4	27
Green Lake		1	1																1		1	1		1	1	1	2		1	1	9	2	11
Iowa	1		1																1	2	3		1	1		2	2	1		1	17		17
Iron																			1		1	1		1	2		2	1		1	7	1	8
Jackson		1	1																	1	1	2	4	6		3	3	4	2	6	27	1	28
Jefferson																						2	1	3	1		1	2	1	3	29	2	31
Juneau																				1	1		1	1		3	3	1	2	3	21	2	23
Kenosha	2		2														1	1	4		4	3	4	7	12	1	13	7	15	22	61	2	63
Kewaunee	1	2	3													1		1	1		1	8	7	15	1		1		2	2	5		5

La Crosse																	1	3	4	5		5				2	2	4	2	1	3	29	1	30
Lafayette																	1		1				1	3	4	2	4	6		3	3	15	2	17
Langlade		1	1																	1		1	8	1	9		1	1	4		4	13	2	15
Lincoln		1	1																	7		7		2	2		2	2	2	1	3	13		13
Manitowoc	3	3	6															2	2	3		3	16	6	22	10	4	14	4	1	5	37	4	41
Marathon	1	3	4																	11		11	5	5	10	10	5	15	6	9	15	44		44
Marinette		2	2																	1	2	3	3	2	5	5	1	6	2	3	5	33	2	35
Marquette																								4	4		1	1	1		1	3	5	8
Milwaukee	15	12	27																	65	6	71	25	63	98	75	23	98	160	125	285	332	25	357
Monroe		1	1																	1	1	2	3		3	2	7	9	1	1	2	23	5	28
Oconto																		1	1		1	1	3	1	4	1	1	2	1	10	11	29	1	30
Oneida	1		1																	2		2	2	1	3	4		4		1	1	11		11
Outagamie	2	1	3														1		1	5	2	7	5	5	10	2	2	4	4	2	6	50	2	52
Ozaukee																				1		1	3		3	3	1	4		1	1	14	3	17
Pepin																				1		1		1	1				1		1	5	1	6
Pierce	1		1																	1		1					1	1	3	2	5	10	3	13
Polk																				1		1	2	2	4	1	3	4	3	5	8	22		22
Portage	2		2																	3	2	5	1	5	6	8	1	9	3	8	11	33	7	40
Price	1	1	2															1	1	2	1	3							2	2	4	8		8
Racine	4	6	10															1	1	7	1	8	21	13	34	8	6	14	27	35	62	114	7	121
Richland																								3	3	5	5	10		5	5	18	3	21
Rock	1	1	2																	10		10	6	3	9	6	7	13	4	6	10	90	7	97
Rusk	1	2	3																	2	1	3	3	1	4	1	1	2		3	3	16		16
St. Croix	1	1	2																	1	1	2		1	1		3	3	11	1	12	12	1	13
Sauk																		1	1		1	1	1	2	3	3		3	3	3	6	30	1	31
Sawyer																		1	1				1		1	4		4	3	1	4	6		6
Shawano	1		1																	4	1	5	2	4	6	8		8	1	4	5	14	1	15
Sheboygan	5	10	15															2	2	7	1	8	20	4	24	2	11	13	14	11	25	45	1	46
Taylor																							4	1	5	1		1	5	4	9	13	2	15
Trempealeau																				4	1	5		3	3		4	4		1	1	33	1	34
Vernon	4	1	5														1		1	1	1	2	2		2	1	4	5	1	5	6	28	8	36
Vilas																				1		1				2		2				6		6
Walworth	1		1																	1		1		2	2		3	3		4	4	21	2	23
Washburn																							1		1	1		1	3	1	4	7	1	8
Washington	2	3	5																	4		4		1	1	2	1	3	1		1	10	2	12
Waukesha	1		1																	4	2	6	8		8	1	5	6	6	6	12	45	7	52
Waupaca		1	1																	1		1	10	10	20	1	2	3	3		3	11	3	14
Waushara		1	1																		1	1	1	6	7	1	3	4				6	3	9
Winnebago	9		9																	13		13	4	1	5	2		2	1	8	9	52	2	54
Wood																	1	1	2	1	2	3	4	6	10		1	1	2	6	8	34	2	36
Total	70	78	148												1	1	9	15	24	221	41	262	252	240	492	295	165	460	379	399	778	2107	206	2313

TABLE NO. 20.—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH

County	Miliary Fever			Mumps			Asiatic Cholera			Cholera Nostras			Dysentery			Plague			Yellow Fever			Spirochetal Hemorrhagic Jaundice			Leprosy			Erysipelas		
	1920	1921	Tot	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	ot.
Adams											1	1																1		1
Ashland											1	1	1		1														2	2
Barron											1	1																3	1	4
Bayfield																														
Brown													2	4	6													2	4	6
Buffalo					1	1							1		1															
Burnett													1	1	2															
Calumet														1	1													1	1	2
Chippewa													2	1	3													1	2	3
Clark																												2	1	3
Columbia														2	2													3	1	4
Crawford																														
Dane											1	1	1		1													6	5	11
Dodge										2	1	3																1		1
Door																														
Douglas													1		1													4	4	8
Dunn																												1		1
Eau Claire																									1		1	1	1	2
Florence																														
Fond du Lac					1	1							1	2	3													1	2	3
Forest													1		1															
Grant														2	2													1		1
Green											1	1		4	4													1		1
Green Lake					1	1							1	1	2														1	1
Iowa																													2	2
Iron																												1		1
Jackson													2	1	3													1	4	5
Jefferson														2	2													2	1	3
Juneau																													1	1
Kenosha										1		1	2		2													3	2	5

Kewaunee																																	
La Crosse														1	1																7	7
Lafayette													1	2	3														1	1	1	2
Langlade													1		1														4			4
Lincoln														1	1																2	2
Manitowoc													3	4	7																1	1
Marathon											1	1	1	1	2														2	2	2	4
Marinette																																	
Marquette																															1	1
Milwaukee				1	1					1	1	2	7	9	16											1		1	17	19	36
Monroe														1	1														1			1
Oconto													1		1														1			1
Oneida														1	1																	
Outagamie										1		1		3	3	1		1													1	1
Ozaukee														1	1														1	1	1	2
Pepin													2		2																1	1
Pierce											1	1																			1	1
Polk																															1	1
Portage													1	5	6																1	1
Price																													1			1
Racine							1		1				2		2														7	4	11
Richland													1		1																	
Rock													7		7																2	2
Rusk										1		1		1	1																1	1
St. Croix																																
Sauk											1	1																			1	1
Sawyer														1	1														1			1
Shawano											1	1		4	4																	
Sheboygan														3	3														4	2	6	
Taylor													1		1																	
Trempealeau																															2	2
Vernon																															1	1
Vilas													1		1																	
Walworth														1	1																	
Washburn																															1	1
Washington											1	1		1	1																1	1
Waukesha											1	1																	2	2	4	
Waupaca											2	2		1	1														1	1	2	
Waushara																													1			1
Winnebago													1		1														4	4	8	
Wood																													3			3
Total					4	4	1		1	6	15	21	46	62	108	1		1								2		2	87	96	183

TABLE NO. 20.—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH

County	Acute Poliomyelitis			Lethargic Encephalitis			Meningococcus Meningitis			Other Epidemic and Endemic Diseases			Glanders			Anthrax			Rabies			Tetanus			Mycoses			Tuberculosis of the Respiratory System		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams		2																										4	2	6
Ashland					1																							29	23	52
Barron					4																							14	17	31
Bayfield																												11	14	25
Brown		1														1		1				1	1	2				47	43	90
Buffalo																												5	4	9
Burnett		1																										6	7	13
Calumet		1			1											1		1										5	4	9
Chippewa		1						1																				34	31	65
Clark										1		1																9	9	18
Columbia		1																					1	1				20	16	36
Crawford																												9	7	16
Dane		1			2			2														1	2	3				56	61	117
Dodge		2			1			1														2	1	3				26	21	47
Door		1																										3	6	9
Douglas								1														1		1				36	25	61
Dunn		2																					1	1				10	12	22
Eau Claire					1			1														1	3	4				47	36	83
Florence																												2	2	4
Fond du Lac		1																				1		1				31	32	63
Forest																												5	5	10
Grant		2						1														1		1				26	22	48
Green		1			1																							11	16	27
Green Lake		1			1			1																				5	18	23
Iowa		1																										16	8	24
Iron																												4	11	15
Jackson																												5	12	17
Jefferson					1																							25	37	62
Juneau					1																		1	1				12	10	22
Kenosha		5			1																							34	33	67

Kewaunee					1																						10	9	19
La Crosse		1			7			1		1		1									1	1	2				49	49	98
Lafayette		2																									6	8	14
Langlade		1																			1		1				6	8	14
Lincoln																					1		1				8	1	9
Manitowoc		1			1																						44	43	87
Marathon		5			1																						31	34	65
Marinette																						1	1				19	14	33
Marquette																											2	3	5
Milwaukee		8			10			2		1		1									3	6	9	1	1	2	571	454	1025
Monroe					1																						9	12	21
Oconto																						1	1				19	10	29
Oneida																					1		1				8	2	10
Outagamie		2			2					1		1															58	38	96
Ozaukee																											9	6	15
Pepin																											6	5	11
Pierce																											9	8	17
Polk					2																						7	8	15
Portage		1																									32	30	62
Price		1																									1	8	9
Racine		1			4																						57	47	104
Richland											1	1															3	14	17
Rock					2												1	1			1	2	3				51	37	88
Rusk					1																	1	1				4	3	7
St. Croix		1						1			1	1										2	2				13	16	29
Sauk		1			1																						11	8	19
Sawyer																											2	3	5
Shawano																								1		1	30	17	47
Sheboygan		2																									26	26	52
Taylor		1																									1	5	6
Trempealeau		2			1																			1		1	13	15	28
Vernon					2																						18	11	29
Vilas		1																									4	6	10
Walworth		2						3																			9	12	21
Washburn		1																									2	4	6
Washington		1																				1	1				17	15	32
Waukesha																											81	74	155
Waupaca		2			1																1		1				17	17	34
Waushara		3						1																			7	7	14
Winnebago		2			3					1		1										2	2				54	56	110
Wood					2																1	2	3	1		1	17	12	29
Total		66			57			16		5	2	7				2	1	3			18	29	47	4	1	5	1888	1699	3587

TABLE NO. 20.—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH

County	Tuberculosis of the Meninges and Central Nervous System			Tuberculosis of the Intestines and Peritoneum			Tuberculosis of the Vertebral System			Tuberculosis of the Joints			Tuberculosis of Other Organs			Disseminated Tuberculosis			Syphilis			Soft Canchre			Gonococcus Infection			Purulent Infection, Septicemia		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams																														
Ashland	4	1	5	2		2								2	2	1	1	2	3		3							2		2
Barron	1	1	2	1	2	3							1		1										1	1	2		4	4
Bayfield	1		1														2	2												
Brown	9	10	19	4	5	9	3		3		2	2	7	3	10		1	1	3	2	5							2	4	6
Buffalo																												1		1
Burnett				1		1				1		1																		
Calumet		1	1				2		2				1		1													1	1	2
Chippewa	1	2	3		1	1				1		1							3	1	4							4		4
Clark				1		1							4		4														2	2
Columbia	1	1	2	1		1								1	1	2		2										2	1	3
Crawford	2	1	3	1	1	2				1		1		1	1															
Dane	4	6	10	3	2	5				1		1	3	6	9				3		3							7	5	12
Dodge	3	1	4	1	1	2		3	3					1	1				1	1	2									
Door		1	1	1	4	5														1	1									
Douglas	1	1	2	1	4	5							2	4	6		1	1	6	1	7					1	1	2	1	3
Dunn		1	1	1		1		1	1																			1	2	3
Eau Claire	1	2	3	2		2							2	3	5				1		1								4	4
Florence																														
Fond du Lac	3	1	4	1	1	2				1	1	2	5	2	7		1	1		1	1							1	3	4
Forest													1		1														1	1
Grant	1		1				2		2				1	1	2		1	1	1		1								2	2
Green				1		1							1	1	2		1	1												
Green Lake																														
Iowa													1		1													2		2
Iron													2		2															
Jackson				1	1	2							1	1	2															

Jefferson	1		1	2	1	3	1	1	2				1		1																
Juneau					1	1																									
Kenosha	2	1	3																										1	5	6
Kewaunee	3		3																												
La Crosse	5	6	11	4	2	6	1		1	1		1	2	1	3	1	1	2	4	1	5								3	2	5
Lafayette		2	2		1	1																							1		1
Langlade	1	1	2		2	2							1		1															3	3
Lincoln				1		1											1	1	1		1						1	1			
Manitowoc	1	1	2				2		2		1	1		1	1					1	1								2		2
Marathon	2	2	4	2		2							3	1	4														2	2	4
Marinette	1	3	4	1	2	3	1		1		1	1	2	2	4	1		1	2	2	4								2		2
Marquette														1	1																
Milwaukee	30	42	72	28	13	41	4	4	8	6	7	13	23	18	41	11	6	17	39	16	55				4	1	5	14	13	27
Monroe	1	6	7		1	1	2		2					1	1													2	2	4
Oconto	1		1		1	1													1	1	2							1		1
Oneida	1	1	2	2		2													2		2								1	1
Outagamie	4	1	5	2	3	5							1		1				2	1	3								3	3
Ozaukee	1		1																										1	1
Pepin																													1	1
Pierce	1		1	1		1							1		1														2	2
Polk		2	2										1	1	2					1	1					1	1			
Portage	1		1	1		1																								
Price										1		1																		
Racine	2	2	4		5	5					1	1	2	2	4				5	3	8							1	4	5
Richland								1	1																				1	1
Rock	7	2	9	4	7	11	1		1				5	4	9	1		1	5	3	8				1	1	2	1	3	4
Rusk													2	1	3					1	1								1	1
St. Croix	1	2	3		1	1		2	2				1		1				1		1							4	1	5
Sauk	1	1	2	1		1	1		1				1		1													1	1	2
Sawyer																														
Shawano	2	1	3	1		1							1	1	2				1		1							1	2	3
Sheboygan	8	2	10	2		2	1	1	2	2		2	3	2	5	1		1		1	1								1	1
Taylor		1	1											1	1	1		1	1	1	2									
Trempealeau	2	2	4	2	1	3							2		2		1	1	1	1	2								1	1
Vernon	2		2		3	3		2	2					1	1													1	3	4
Vilas								1	1																				1	1
Walworth	1	2	3	1	1	2							1	2	3				1	3	4							1	2	3
Washburn																														
Washington	3	3	6										1	2	3				1		1									
Waukesha	3	2	5	2	1	3	2		2																				2	2
Waupaca	1	1	2		3	3								1	1	2		2										3	4	7
Waushara													1		1															
Winnebago	2	1	3		3	3		1	1				4	3	7	1	1	2	4	2	6							3	1	4
Wood	1	2	3		1	1								1	1													1	1	2
Total	124	122	246	80	75	155	23	17	40	15	13	28	91	74	165	22	18	40	92	45	137				6	6	12	70	94	164

TABLE NO. 20.—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH

County	Other Infectious Diseases			Cancer and Other Malignant Tumors of the Buccal Cavity			Cancer and Other Malignant Tumors of the Stomach and Liver			Cancer and Other Malignant Tumors of the Peritoneum, Intestines and Rectum			Cancer and Other Malignant Tumors of the Female Genital Organs			Cancer and Other Malignant Tumors of the Breast			Cancer and Other Malignant Tumors of the Skin			Cancer and Other Malignant Tumors of Other Unspecified Organs			Benign Tumors and Tumors not Returned as Malignant		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams							3	6	9	3	1	4				1	1	2					1	1			
Ashland				1		1	15	8	23	3	3	6	2	5	7					1	1	3	7	10			
Barron				1	1	2	9	14	23	4	3	7	2	2	4	1	1	2	1		1	4	9	13			
Bayfield							1	5	6	1		1								1	1	1	2	3			
Brown				2	3	5	35	40	75	7	4	11	3	8	11	6	9	15	2	2	4	9	13	22	1		1
Buffalo							8	12	20	3	4	7	1		1	1	2	3				1	3	4			
Burnett							6	4	10	2		2										1	1	2			
Calumet					1	1	5	7	12	1	4	5	1	1	2		1	1				1	2	3			
Chippewa				2	1	3	22	15	37	2	5	7	2	4	6	2	2	4	1	3	4	7	4	11			
Clark				1		1	9	9	18	4	2	6	2	2	4	1	4	5	2	1	3	2	5	7			
Columbia					1	1	9	17	26	5	4	9	3	7	10	1	4	5				9	8	17			
Crawford							5	7	12	2	1	3	1	3	4				1		1		3	3			
Dane					3	3	31	37	68	11	11	22	12	9	21	8	5	13	2	3	5	23	27	50			
Dodge					1	1	23	33	56	10	11	21	7	3	10	4	1	5	2	2	4	11	12	23			
Door				1		1	11	10	21	2	2	4		2	2	1	2	3	1		1	4	4	8			
Douglas					1	1	12	17	29	4	3	7	5	1	6	1	6	7	1		1	4	12	16	1		1
Dunn				1		1	12	9	21	3	2	5	2	1	3	2	3	5		1	1	2	7	9			
Eau Claire				2	1	3	13	22	35	4	3	7	6	4	10	2	6	8	1	2	3	6	9	15			
Florence							2	3	5																		
Fond du Lac				1		1	28	25	53	7	16	23	4	6	10	4	4	8	2	2	4	8	15	23			
Forest					1	1	1	4	5													1	2	3			
Grant					2	2	19	17	36	7	7	14	6	4	10	1	4	5	2	1	3	8	8	16			
Green					1	1	9	10	19	6		6	1	3	4	1	2	3				3	7	10			
Green Lake							10	4	14	5	2	7	2		2	1		1				6	10	16			
Iowa				1		1	8	13	21	6	2	8	1		1	1	1	2		1	1	2	6	8			
Iron								2	2				1		1		1	1					3	3			
Jackson				1		1	5	12	17		1	1	1	1	2	2	2	4				1	3	4		1	1
Jefferson					2	2	19	19	38	9	7	16	3	3	6	2	3	5	1		1	7	16	23		1	1

Juneau							15	9	24	1	6	7	2		2		1	1				1	2	3	1		1
Kenosha				2	1	3	16	13	29	2	2	4	5	5	10	1	2	3				6	5	11			
Kewaunee				1		1	12	9	21	1	1	2		1	1				1		1	2	3	5			
La Crosse				1	2	3	30	34	64	13	13	26	5	4	9	7	6	13				12	15	27			
Lafayette					1	1	9	7	16	5	1	6	2	1	3	1	3	4	2	1	3	2	4	6			
Langlade							7	6	13	1	1	2	1	2	3		2	2		1	1		4	4			
Lincoln							12	15	27	2	3	5	1		1							4	6	10			
Manitowoc				1		1	20	24	44	7	7	14	3	7	10	2	2	4		1	1	5	7	12			
Marathon				2		2	13	28	41	7	10	17	6	3	9	4	3	7	1		1	13	10	23			
Marinette				1	1	2	13	8	21	3	5	8	2	2	4	3	4	7	2		2	1	5	6			
Marquette							4	6	10	1	1	2	1		1	1	1	2				1	2	3			
Milwaukee				16	14	30	240	225	465	72	85	157	57	58	115	29	43	72	11	9	20	97	98	195	1	1	2
Monroe				1		1	7	12	19	5	5	10	1	4	5	1	2	3				1	6	7			
Oconto							16	15	31	1		1		1	1	1	3	4	1	2	3	3	4	7			
Oneida				1		1	3	6	9	1	3	4		1	1							3	3	6			
Outagamie				3		3	21	25	46	2	3	5	3	5	8	3	4	7	1		1	8	9	17			
Ozaukee							10	15	25	2	2	4	1		1	1	4	5	1		1	2	6	8			
Pepin							3	2	5					2	2							1	2	3			
Pierce				1	2	3	13	12	25	1	1	2		3	3	1	3	4		1	1		6	6			
Polk					1	1	11	9	20	1	1	2	2		2	1		1		1	1	4	4	8			
Portage				1		1	19	9	28	3	3	6	3	2	5	1	1	2				2	3	5			
Price							1	4	5	1		1					2	2				1	2	3			
Racine				2		2	29	36	65	9	14	23	8	8	16	3	7	10	3		3	12	15	27			
Richland				1	1	2	5	7	12	2	4	6	2		2	1		1	1		1	1	5	6			
Rock				3	3	6	20	23	43	13	9	22	6	9	15	7	6	13	1	4	5	12	12	24			
Rusk					1	1	2	4	6		3	3		1	1	2	1	3				4		4			
St. Croix					2	2	11	11	22	4	3	7	4	3	7	1	1	2	1		1	5	4	9			
Sauk							17	27	44	6	6	12	2	1	3	7	2	9	2		2	7	7	14		1	1
Sawyer					2	2		1	1	1		1					1	1									
Shawano							18	14	32	2	1	3	1	1	2	1	1	2				3	5	8			
Sheboygan				2	3	5	27	26	53	6	3	9	6	3	9	2	5	7	1	1	2	10	13	23	1		1
Taylor					1	1	4	3	7		1	1	1	2	3		1	1		1	1	1	2	3			
Trempealeau					2	2	9	8	17	4	4	8	2	1	3	2	2	4				1	4	5			
Vernon					1	1	5	10	15		1	1	2	5	7	1	3	4				3	2	5			
Vilas							2	3	5													2	1	3			
Walworth				1	1	2	20	15	35	2	7	9	3	2	5	5	2	7	2		2	6	3	9	1		1
Washburn				1		1	1	3	4		1	1	1	2	3	1		1		1	1		1	1			
Washington					1	1	16	16	32	3	4	7	1	1	2	1	1	2		1	1	4	8	12			
Waukesha				4	2	6	18	21	39	6	10	16	2	5	7	1	3	4	2	1	3	7	7	14			
Waupaca				1		1	18	19	37	3	11	14	5	1	6	3	4	7	5		5	6	8	14			
Waushara		1	1				10	3	13	1	1	2	2	1	3	1	2	3	1	1	2	4	1	5			
Winnebago				4	3	7	28	38	66	13	14	27	6	8	14	5	4	9	2	5	7	21	15	36			
Wood				2	1	3	15	18	33	3	5	8	1	2	3	4	5	9	1		1	9	11	20		2	2
Total		1	1	66	65	131	1100	1180	2280	221	253	674	218	226	444	148	201	349	61	51	112	411	529	940	6	6	12

TABLE NO. 20.—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH

County	Acute Rheumatic Fever			Chronic Rheumatism Orteoarthritis, Gout			Scurvy			Pellagra			Beriberi			Rickets			Diabetes Mellitus			Anaemia, Chlorosis			Diseases of the Pituitary Gland		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams					1	1													1	1	2		1	1			
Ashland	1	2	3	1		1											1	1	7	9	16	1	3	4			
Barron	3	3	6	1	1	2													9	8	17	5	4	9			
Bayfield		1	1	2		2													3	2	5		1	1			
Brown	1	7	8		1	1													17	13	30	15	9	24			
Buffalo	1		1		1	1													2	1	3	1		1			
Burnett		1	1																	1	1						
Calumet	2		2																3	4	7						
Chippewa	1	2	3		1	1											1	1	6	13	19	3	3	6		1	1
Clark	1	2	3	1	1	2													2	4	6	3	2	5			
Columbia	5	1	6	1	1	2													7	8	15	4	8	12			
Crawford				1	1	2													3	2	5		1	1			
Dane	10	7	17		1	1		1	1	1		1							15	15	30	10	11	21			
Dodge		2	2		4	4										1		1	8	11	19	7	5	12			
Door		2	2																2	3	5	3	1	4			
Douglas	2	5	7																9	8	17	1	8	9			
Dunn	1	3	4		1	1											1	1	5	9	14	3	2	5			
Eau Claire		1	1	2	1	3													7	8	15	7	7	14			
Florence					1	1																					
Fond du Lac	4	5	9	1	2	3											2	2	11	16	27	8	10	18			
Forest	1	1	2																1		1						
Grant	2		2	2	4	6													8	9	17	6	9	15			
Green		2	2		1	1													7	1	8	2	1	3			
Green Lake	1	3	4	1		1													3	4	7	1	4	5			
Iowa	1	1	2		1	1										1		1	3	4	7	3	3	6			
Iron																			1		1						
Jackson	1	3	4		1	1													2	3	5	1	4	5			
Jefferson		1	1	2		2													5	7	12	3	3	6			
Juneau		1	1		1	1													3	2	5	2	5	7			

Kenosha		2	2		1	1													6	5	11	7	2	9			
Kewaunee	2		2	1	1	2														1	1	1		1			
La Crosse	2		2		2	2													13	12	25	9	10	19			
Lafayette				1		1													3	1	4	1	3	4			
Langlade	2	1	3				1		1							1		1	7	2	9						
Lincoln		2	2														1	1	2	2	4						
Manitowoc	4	3	7	3	1	4										1		1	8	14	22	4	4	8			
Marathon	2	4	6	6	3	9					1	1					1	1	9	6	15	2	4	6			
Marinette	1	1	2		1	1											1	1	5	4	9	4	4	8			
Marquette				1		1														2	2	1		1			
Milwaukee	30	19	49	8	9	17	3	1	4							9	3	12	96	84	180	46	46	92		1	1
Monroe	4	1	5	2		2											1	1	2	5	7	4	3	7			
Oconto				1	1	2											1	1	4		4	4	3	7			
Oneida					2	2	1		1										2	3	5						
Outagamie	2	6	8	1	1	2													7	6	13	6	3	9			
Ozaukee				1		1													2	5	7	5	1	6			
Pepin																			1	4	5	2	1	3			
Pierce	2		2																6	3	9	4	4	8			
Polk	2	2	4	1		1											1	1	2	3	5	3	1	4			
Portage	1	1	2																5	3	8	3	1	4			
Price					1	1													1	4	5	1		1			
Racine	3	2	5														1	1	13	10	23	10	8	18			
Richland	1	1	2																1	1	2	3	2	5			
Rock	5	1	6	2	1	3													14	6	20	10	7	17			
Rusk	3		3	1		1													5	2	7	1	3	4			
St. Croix	1	1	2	1		1											1	1	5	4	9	4	3	7			
Sauk	1	1	2	2	1	3										1		1	6	2	8	4	2	6			
Sawyer																			1		1						
Shawano	1		1	1		1													7	6	13	3	3	6			
Sheboygan	4	6	10	2	2	4										1		1	10	17	27	9	5	14			
Taylor		1	1																1	2	3	1	2	3			
Trempealeau	1	3	4	1		1	1		1										5	3	8	3	3	6			
Vernon	3	1	4		3	3													6	5	11	2	3	5			
Vilas					1	1													1	2	3		1	1			
Walworth		1	1		1	1													7	6	13	4	8	12			
Washburn		1	1																	1	1						
Washington				1	2	3													12	5	17	1	1	2			
Waukesha	2	2	4	3	2	5										1		1	10	11	21	5	4	9			
Waupaca	2	1	3	2	2	4													11	7	18	1	4	5			
Waushara																2		2	2	1	3						
Winnebago	4	4	8	1	4	5													6	10	16	10	9	19			
Wood	1	4	5	1	1	2													13	8	21	3	2	5			
Total	124	128	252	59	69	128	6	2	8	1	1	2				18	16	34	467	444	911	270	265	535		2	2

TABLE NO. 20.—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH

County	Diseases of the Thyroid Gland			Diseases of the Parathyroid Glands			Diseases of the Thymus Glands			Diseases of the Adrenals (Addison's Diseases)			Diseases of the Spleen			Leukemia and Hodgkin's Disease			Alcoholism (Acute or Chronic)			Chronic Poisoning by Mineral Substances			Chronic Poisoning by Organic Substances			Other General Diseases		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams																	1	1												
Ashland																			1	1	2								1	1
Barron		1	1													3	1	4												
Bayfield																			1	1	2	1		1						
Brown	6	3	9														2	2		1	1							1	1	2
Buffalo										1		1				1		1										1		1
Burnett																1		1												
Calumet																	2	2		1	1									
Chippewa	2	6	8																1	1	2							2		2
Clark										1		1																		
Columbia	4	2	6										1		1	3	3	6		1	1							1		1
Crawford	1	1	2										1		1					1	1									
Dane	4	5	9							1		1		1	1	1	3	4								2	2			
Dodge	3		3								1	1																		
Door	1	1	2																									1		1
Douglas	1	1	2													1	3	4	3	4	7				1		1	1	1	2
Dunn	1		1								1	1				1		1										1		1
Eau Claire	4	7	11														1	1												
Florence																														
Fond du Lac	4	7	11								1	1				1	1	2												
Forest																				1	1									
Grant	1	6	7								1	1					1	1										1	1	2
Green	1		1													1		1												
Green Lake		1	1																											
Iowa	3		3													1	1	2		1	1								2	2
Iron	1		1																1		1									
Jackson		1	1																	1	1									
Jefferson		1	1							1		1				3		3		3	3							2		2
Juneau	1	2	3																									1		1
Kenosha																				1	1		1	1					1	1

Kewaunee																												1		1
La Crosse	8	5	13							1		1		1	1	5		5		1	1								1	1
Lafayette																														
Langlade	1	1	2																	1	1							1		1
Lincoln	2		2								1	1					1	1												
Manitowoc	2	2	4											1	1	1	1	2										3	2	5
Marathon	5	4	9								1	1				4	3	7		1	1									
Marinette	1	2	3								1	1					2	2		1	1									
Marquette		1	1								1	1																		
Milwaukee	23	19	42					2	2	7	8	15				11	12	23	6	11	17	1	2	3				5	3	8
Monroe	1	2	3														2	2												
Oconto	2		2																											
Oneida	1		1																	1	1									
Outagamie	4	4	8														2	2												
Ozaukee	1		1																									1		1
Pepin	1	1	2																1		1									
Pierce		2	2														1	1										2	2	4
Polk	2		2																									1		1
Portage																1	1	2	1		1							1	1	2
Price	1	1	2													1	2	3												
Racine	2	3	5								1	1					1	1	1	1	2	1		1				2	4	6
Richland																														
Rock	3	3	6								1	1				2	1	3											1	1
Rusk																	1	1		1	1							2		2
St. Croix	2		2					1	1							2		2												
Sauk		2	2								1	1				2	1	3											1	1
Sawyer																														
Shawano	1		1													1	1	2		1	1									
Sheboygan	6	2	8													2		2										1	2	3
Taylor																														
Trempealeau	2	2	4								1	1					1	1		1	1									
Vernon	1		1													2	1	3		1	1									
Vilas																														
Walworth	1		1								1	1				1	2	3		1	1		1	1				1		1
Washburn	1		1																										1	1
Washington	3	1	4							1		1				1		1												
Waukesha	2	2	4													2		2	1	3	4									
Waupaca	1	3	4		1	1											1	1	1	1	2									
Waushara																														
Winnebago	4	1	5														3	3	1	1	2								1	1
Wood	2	4	6																1		1									
Total	124	112	236		1	1		3	3	13	21	34	2	3	5	55	59	114	20	45	65	3	4	7	1	2	3	33	26	59

TABLE NO. 20.—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH

County	Encephalitis			Meningitis			Locomotor-ataxia			Other Diseases of the Spinal Cord			Cerebral Hemorrhage (Apoplexy)			Paralysis Without Specified Cause			General Paralysis of the Insane			Other Forms of Mental Alienation			Epilepsy		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams				1		1							7	6	13	1		1									
Ashland	1		1	5	3	8	1	1	2				23	18	41	2	1	3					1	1		1	1
Barron	2	1	3	5	5	10				1	2	3	30	21	51	2	3	5				1		1		2	2
Bayfield				1	1	2		1	1				3	7	10	1		1								1	1
Brown		1	1	4	5	9		1	1	6	3	9	47	46	93	3	1	4	1		1	1	2	3	5	2	7
Buffalo					1	1		1	1	1		1	15	18	33				1		1				1	1	2
Burnett		1	1	1	1	2							7	5	12		1	1							1		1
Calumet				3	3	6				3		3	15	18	33	1		1							1		1
Chippewa	2	1	3	6	1	7				3	1	4	17	18	35	1	3	4				4	1	5	21	13	34
Clark	1	1	2					1	1	1	1	2	25	26	51	2	8	10								2	2
Columbia	1	1	2		1	1	2		2	2	2	4	31	28	59	1	8	9	4	1	5		1	1	2	1	3
Crawford					1	1				1	1	2	12	9	21	1		1									
Dane		4	4	4	4	8	1	1	2	6	4	10	68	66	134	1	6	7	32	14	46	6	9	15	1	3	4
Dodge	1		1	3	5	8	1		1	2	1	3	30	44	74	5	4	9	3	1	4					3	3
Door	1	1	2	1	1	2					3	3	12	22	34	3	1	4								1	1
Douglas				4	4	8	1	1	2	2	4	6	31	30	61	4	3	7		1	1	1	4	5	1	1	2
Dunn		1	1	2	2	4				2	1	3	30	15	45	2	3	5									
Eau Claire	3	1	4	4	2	6				4	3	7	41	30	71	3	3	6		1	1		2	2		1	1
Florence													2	2	4												
Fond du Lac		2	2	1	2	3				5	2	7	37	39	76	2	1	3		1	1	5		5		3	3
Forest													2	2	4												
Grant	1		1	2	1	3	2	1	3	5	4	9	39	28	67	5	4	9		1	1		2	2		2	2
Green		2	2	2	1	3		1	1	1	1	2	24	14	38	2	3	5		1	1				1		1
Green Lake	2	1	3	1	1	2					1	1	9	11	20	1	1	2							1		1
Iowa		1	1	1		1				3	1	4	17	25	42	2	3	5		1	1	1	1	2	1	1	2
Iron													4	2	6	1	2	3									
Jackson				2		2				1	1	2	17	10	27	2		2							1		1
Jefferson		1	1	1		1		2	2	1	5	6	34	40	74	3		3				1	1	2		5	5
Juneau											1	1	6	14	20	3	2	5	1		1						
Kenosha	4	3	7		2	2	1		1	4		4	14	20	34	2	3	5								1	1

Kewaunee	....	....	....	....	....	....	....	....	....	2	....	2	18	16	34	3	....	3	....	....	....	....	1	1	1	1	2
La Crosse	....	1	1	6	3	9	1	....	1	1	2	3	34	32	66	1	2	3	....	2	2	....	1	1	2	2	4
Lafayette	....	....	....	1	2	3	....	1	1	1	....	1	21	16	37	....	1	1	....	....	....	....	....	....	....	....	....
Langlade	1	....	1	1	1	2	....	....	....	1	....	1	11	9	20	2	3	5	....	....	....	....	....	....	....	1	1
Lincoln	....	....	....	1	....	1	....	....	....	1	....	1	14	19	33	1	....	1	....	....	....	....	....	....	1	1	2
Manitowoc	1	3	4	2	1	3	....	1	1	1	1	2	45	45	90	1	3	4	....	....	....	1	....	1	1	2	3
Marathon	1	4	5	5	4	9	....	....	....	2	7	9	36	43	79	2	1	3	1	1	2	....	....	....	2	....	2
Marinette	....	1	1	....	1	1	....	....	....	3	1	4	15	24	39	7	4	11	....	....	....	....	....	....	....	3	3
Marquette	....	....	....	....	....	....	....	....	....	....	....	....	3	9	12	1	....	1	1	....	1	....	....	....	....	....	....
Milwaukee	10	13	23	34	21	55	9	6	15	20	12	32	335	364	699	31	8	39	45	38	83	48	23	71	9	18	27
Monroe	....	2	2	4	2	6	1	1	2	1	2	3	34	35	69	1	1	2	....	....	....	....	2	2	2	1	3
Oconto	....	....	....	....	2	2	....	1	1	1	1	2	10	15	25	10	3	13	....	....	....	....	....	....	2	2	4
Oneida	....	1	1	1	1	2	....	....	....	1	....	1	5	11	16	....	4	4	....	....	....	....	....	....	....	....	....
Outagamie	1	1	2	7	6	13	....	1	1	5	2	7	46	43	89	6	3	9	1	1	2	1	1	2	2	3	5
Ozaukee	1	1	2	2	1	3	....	1	1	....	2	2	19	21	40	2	....	2	....	....	....	1	....	1	1	....	1
Pepin	....	....	....	....	....	....	....	....	....	1	....	1	9	10	19	....	....	....	....	....	....	....	....	....	1	1	2
Pierce	....	....	....	....	1	1	....	....	....	2	....	2	18	19	37	2	1	3	....	....	....	....	....	....	....	....	....
Polk	....	1	1	3	1	4	....	....	....	....	1	1	21	25	46	1	2	3	1	....	1	....	1	1	....	2	2
Portage	1	....	1	1	1	2	....	....	....	1	1	2	27	25	52	3	....	3	....	....	....	....	....	....	2	1	3
Price	....	....	....	....	1	1	....	....	....	....	....	....	9	7	16	....	....	....	....	....	....	....	....	....	1	....	1
Racine	2	1	3	5	4	9	....	2	2	3	1	4	49	67	116	5	3	8	....	....	....	1	1	2	2	4	6
Richland	....	....	....	....	1	1	....	2	2	2	....	2	22	20	42	2	....	2	....	....	....	2	....	2	1	1	2
Rock	1	1	2	3	1	4	....	2	2	7	4	11	55	51	106	3	1	4	3	5	8	4	1	5	2	4	6
Rusk	1	....	1	2	....	2	....	....	....	....	....	....	6	7	13	....	1	1	....	....	....	....	....	....	....	1	1
St. Croix	....	1	1	2	....	2	1	....	1	5	2	7	23	20	43	3	1	4	1	2	3	2	1	3	....	2	2
Sauk	....	1	1	1	....	1	....	1	1	2	3	5	39	42	81	6	9	15	....	....	....	....	1	1	2	....	2
Sawyer	....	....	....	....	....	....	....	....	....	....	....	....	6	6	12	....	....	....	....	....	....	....	....	....	....	1	1
Shawano	....	3	3	1	2	3	....	....	....	1	1	2	19	27	46	2	3	5	....	2	2	1	1	2	4	1	5
Sheboygan	....	....	....	3	1	4	....	....	....	4	....	4	51	56	107	....	....	....	1	....	1	1	....	1	3	2	5
Taylor	....	....	....	....	1	1	....	....	....	....	1	1	4	4	8	1	1	2	....	....	....	....	....	....	....	....	....
Trempealeau	1	....	1	2	1	3	....	....	....	2	....	2	15	20	35	2	....	2	....	....	....	....	2	2	1	1	2
Vernon	....	1	1	1	....	1	1	....	1	....	1	1	21	15	36	1	1	2	....	....	....	....	1	1	....	1	1
Vilas	....	....	....	....	1	1	....	....	....	....	....	....	2	2	4	2	....	2	....	....	....	....	....	....	....	....	....
Walworth	1	....	1	2	3	5	....	1	1	1	2	3	37	27	64	5	9	14	2	....	2	3	....	3	5	1	6
Washburn	....	....	....	....	....	....	....	....	....	1	....	1	5	7	12	....	2	2	....	....	....	....	....	....	....	....	....
Washington	....	....	....	1	3	4	....	....	....	2	....	2	34	43	77	1	....	1	2	2	4	....	1	1	2	....	2
Waukesha	....	....	....	....	3	3	....	1	1	4	6	10	44	49	93	....	....	....	2	3	5	1	1	2	2	2	4
Waupaca	....	1	1	....	2	2	1	2	3	5	4	9	44	42	86	4	6	10	1	1	2	2	4	6	4	1	5
Waushara	....	....	....	1	1	2	1	....	1	2	3	5	6	15	21	1	1	2	....	....	....	....	....	....	1	....	1
Winnebago	4	2	6	4	3	7	2	4	6	8	7	15	63	69	132	4	8	12	20	20	19	25	13	38	4	3	7
Wood	....	2	2	1	....	1	....	2	2	....	1	1	25	22	47	....	1	1	....	....	....	....	....	....	1	....	1
Total	45	64	109	151	123	274	26	40	66	147	110	257	1949	2033	3982	172	147	319	123	98	221	113	80	193	98	107	205

TABLE NO. 20.—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH

County	Convulsions (Non-Puerperal)			Infantile Convulsions			Chorea			Neuralgia and Neuritis			Softening of the Brain			Other Diseases of the Nervous System			Diseases of the Eye and Annexa			Diseases of the Ear and of the Mastoid Process			Peri-carditis			Endocarditis and Myocarditis (Acute)		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams					1	1																						1		1
Ashland				3	2	5								1	1	1	2	3					1	1				3		3
Barron				2	1	3					1	1				2	1	3				1		1	1		1		1	1
Bayfield				6	1	7										1		1										1		1
Brown				7	3	10											3	3				2	1	3				7	3	10
Buffalo				2	2	4							1		1		1	1					1	1				1	3	4
Burnett				1		1																							1	1
Calumet				2	1	3										1	1	2								1	1		2	2
Chippewa				1	1	2				1		1	1	1	2	12	4	16							1		1	1	3	4
Clark				3		3										2	1	3							1		1	2		2
Columbia				2		2					1	1	1		1	3		3				1		1				1	3	4
Crawford																1	1	2										2	3	5
Dane				3	3	6				1		1	1		1	4	7	11					3	3	1		1	9	1	10
Dodge				6	3	9							1		1	1		1								1	1	3	2	5
Door				2		2				1		1				2	1	3										1	1	2
Douglas				1	1	2	1		1		1	1		2	2	3		3				1	1	2		1	1	5	2	7
Dunn				2	1	3											1	1					1	1	2	1	3	2		2
Eau Claire				1	1	2		1	1				1		1	1	1	2					1	1				2	3	5
Florence		1	1																									1		1
Fond du Lac				8	2	10										7	2	9					1	1	2		2	18	4	22
Forest				1		1																								
Grant				1	1	2				1		1		2	2	3	2	5										2		2
Green					2	2					1	1				1	1	2								2	2		2	2
Green Lake				1		1				1		1																3		3
Iowa				2	1	3				1	1	2	1		1		2	2										3		3
Iron				1	1	2				1		1					1	1				2		2					1	1
Jackson				1		1								1	1										1		1			
Jefferson				2	2	4				1	1	2	1	1	2	2	1	3					1	1		2	2	5	1	6
Juneau				1		1							1		1		1	1				1		1				1	2	3

Kenosha				1	1	2									3	1	4				3	4	7		1	1	5		5
Kewaunee				1	1	2																					1	2	3
La Crosse		1	1	4		4									5	4	9					3	3		1	1	6	3	9
Lafayette										1	1		1	1	1		1										2	2	4
Langlade				4		4							1	1		1	1				1	1	2	1	1	2			
Lincoln		1	1	2		2										1	1					1	1				4		4
Manitowoc				9	3	12							1	1	2	1	3				1	1	2	1	1	2	9	6	15
Marathon		2	2	6	7	13	1		1				1	1		2	2				1		1				7	3	10
Marinette				2	1	3						1		1	1	1	2				1		1				1	1	2
Marquette																					1		1						
Milwaukee	2	2	4	35	18	53	1		1	4	2	6	3	3	6	20	26	46			15	17	32	3	8	11	84	48	132
Monroe				5	2	7				1		1					2	2									3		3
Oconto	1		1	3	3	6										2		2				1	1					2	2
Oneida				2		2										1	2	3							1	1	1		1
Outagamie				3	8	11							1		1	1	1	2			2	2	4				2	2	4
Ozaukee				2		2																					1	2	3
Pepin				1		1																						1	1
Pierce					2	2						2		2							1		1				3		3
Polk													1	1		1	1					1	1	1		1	2	1	3
Portage				1	3	4							1	1		3	3										1	2	3
Price				2		2															1	1	2				3		3
Racine				8	6	14						1		1	4	4	8				1	3	4	2		2	6	3	9
Richland										1		1			2	1	3								1	1	1	1	2
Rock				1	2	3									1	1	2				1		1	2	1	3	8	4	12
Rusk				1		1									3	2	5										2		2
St. Croix															1	1	2				1		1					1	1
Sauk		1	1	2	1	3																1	1	1	1	2	1	1	2
Sawyer				1	1	2									1		1												
Shawano				4	1	5		1	1	1		1			1		1										3	2	5
Sheboygan	1		1	4	4	8						2		2		4	4								2	2	13	22	35
Taylor																											2		2
Trempealeau					2	2				1		1				1	1				1	1	2				4	1	5
Vernon	1		1	1		1									1	1	2		1	1				1		1	3		3
Vilas				1		1																					1		1
Walworth				4	1	5									1	1	2				1		1				2	3	5
Washburn					2	2																					1		1
Washington				1	2	3									1	2	3				1	1	2				1	3	4
Waukesha					3	3				1		1			2	2	4				1		1				2		2
Waupaca				1		1							1	1		1	1								2	2	2	4	6
Waushara				1		1					1	1													4	4			
Winnebago		1	1	5	7	12				1		1		1	3	2	5					1	1		2	2	6	7	13
Wood		1	1	1		1							1		3	5	8					1	1				3	2	5
Total	5	10	15	181	111	292	3	2	5	18	10	28	20	19	39	107	108	215		1	1	42	51	93	21	34	55	270	167	437

TABLE NO. 20.—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH

County	Angina Pectoris			Other Diseases of the Heart			Diseases of the Arteries			Embolism and Thrombosis			Diseases of the Veins			Diseases of the Lymphatic System			Hemorrhage Without Specified Cause			Other Diseases of the Circulatory System			Diseases of the Nasal Fossae and Their Annexa		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams	1	....	1	9	6	15	3	3	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ashland	....	....	....	20	27	47	2	3	5	....	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Barron	3	4	7	27	36	63	3	5	8	2	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Bayfield	....	1	1	7	13	20	1	1	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Brown	4	8	12	42	72	114	25	12	37	6	6	12	....	....	....	1	2	3	....	....	....	....	1	1	....	....	....
Buffalo	4	....	4	16	10	26	3	1	4	....	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....
Burnett	....	....	....	4	12	16	1	....	1	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Calumet	....	....	....	18	16	34	3	2	5	....	1	1	1	....	1	1	....	1	....	....	....	....	....	....	....	....	....
Chippewa	2	2	4	41	41	82	2	....	2	3	1	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Clark	3	2	5	22	31	53	5	4	9	1	....	1	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....
Columbia	8	....	8	32	37	69	3	6	9	1	....	1	2	....	2	....	....	....	....	....	....	2	....	2	....	....	....
Crawford	....	1	1	13	20	33	3	3	6	2	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Dane	11	12	23	137	142	279	14	10	24	8	....	8	....	1	1	1	1	2	....	....	....	....	1	1	....	....	....
Dodge	4	7	11	52	69	121	9	8	17	1	....	1	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....
Door	....	2	2	15	22	37	1	5	6	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....
Douglas	1	6	7	36	53	89	9	2	11	1	....	1	....	....	....	1	....	1	....	....	....	1	....	1	....	....	....
Dunn	1	1	2	31	23	54	6	5	11	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Eau Claire	4	5	9	62	59	121	7	6	13	2	....	2	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....
Florence	....	....	....	2	3	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Fond du Lac	6	9	15	86	83	169	11	6	17	1	4	5	1	1	2	2	....	2	....	....	....	....	....	....	....	....	....
Forest	1	....	1	7	6	13	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Grant	4	4	8	51	56	107	6	10	16	1	3	4	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....
Green	4	6	10	16	26	42	1	3	4	1	2	3	1	....	1	....	....	....	....	....	....	1	1	2	....	....	....
Green Lake	1	2	3	19	16	35	8	6	14	1	1	2	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....
Iowa	2	1	3	25	27	52	2	2	4	5	....	5	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....
Iron	1	....	1	4	4	8	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jackson	1	1	2	21	24	45	2	2	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jefferson	3	2	5	38	55	93	2	4	6	1	....	1	2	....	2	1	....	1	....	....	....	....	....	....	....	....	....
Juneau	1	....	1	19	20	39	3	....	3	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

Kenosha	2	3	5	47	45	92				1		1																
Kewaunee	1		1	13	13	26	3	1	4	1		1				1		1										
La Crosse	1	3	4	53	69	122	10	8	18	4	2	6	1		1													
Lafayette		2	2	15	22	37	1		1	2		2																
Langlade		2	2	17	33	50		1	1		1	1																
Lincoln	5	4	9	18	22	40	3	2	5		1	1					1	1										
Manitowoc	1	1	2	52	52	104	13	10	23	3	1	4		2	2													
Marathon	3	1	4	57	60	117	9	2	11	1		1	1		1													
Marinette	2		2	41	39	80	4	7	11							1	1	2										
Marquette				13	8	21	2	2	4								1	1										
Milwaukee	33	30	63	660	688	1348	46	83	129	22	3	25	6	4	10	6	8	14				3	1	4	1	1	2	
Monroe		3	3	31	28	59	3	2	5	1		1		2	2													
Oconto	4		4	25	26	51	3		3							1		1										
Oneida				10	17	27								1	1	1		1										
Outagamie	3	2	5	52	56	108	2	6	8	1		1																
Ozaukee		1	1	20	15	35	2	3	5																			
Pepin				5	10	15	2		2																			
Pierce		2	2	22	23	45	1	1	2																			
Polk	1	1	2	31	24	55	3	4	7		3	3																
Portage	2	1	3	34	37	71	5	8	13	1		1																
Price	1	3	4	9	13	22	3	1	4																			
Racine	9	6	15	58	82	140	2	4	6	2	4	6	1	1	2													
Richland	1	6	7	24	27	51	2	3	5								2	2										
Rock	6	6	12	73	78	151	7	11	18	1	1	2		1	1	2		2				1		1				
Rusk	2		2	7	12	19	1	2	3																			
St. Croix	5	2	7	11	26	37	6	3	9	4		4					1	1		1	1							
Sauk	4	6	10	30	32	62	4	6	10	2		2								1	1							
Sawyer		3	3	4	5	9																						
Shawano	4	2	6	36	52	88	5	8	13	2		2	1		1										1		1	
Sheboygan	4	3	7	62	65	127	3	6	9	2	1	3		1	1													
Taylor	1		1	14	13	27	3	3	6	2		2								1	1							
Trempealeau	1	3	4	36	34	70	7	3	10	1		1																
Vernon	3	4	7	25	34	59	1	2	3	1		1	1		1		1	1										
Vilas		1	1	6	14	20	1	1	2	1		1																
Walworth	6	4	10	48	51	99	1	8	9	1	1	2	1		1	1	1	2										
Washburn		1	1	5	8	13																						
Washington				17	26	43	3	4	7		2	2																
Waukesha	4	5	9	67	67	134	11	11	22	6		6	1		1													
Waupaca	7	5	12	47	57	104	2	5	7	2		2																
Waushara	1	3	4	15	24	39	1	2	3																			
Winnebago	6	9	15	115	123	238	21	20	41	5	2	7		2	2		1	1										
Wood				36	32	68	3	7	10	7	1	8																
Total	193	204	397	2833	3171	6004	334	360	694	114	44	158	22	17	39	21	22	43		3	3	9	5	14	2	1	3	

TABLE NO. 20.—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH

County	Diseases of the Larynx			Bronchitis			Broncho-Pneumonia			Pneumonia			Pleurisy			Congestion and Hemorrhagic Infarct of the Lung			Gangrene of the Lung			Asthma			Pulmonary Emphysema		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams				1	1	2	1	2	3	1	3	4															
Ashland					2	2	7	8	15	24	14	38	1		1				1		1		1	1			
Barron				5	5	10	16	17	33	9	10	19	2		2	1		1					1	1			
Bayfield							5	1	6	4	7	11		1	1	2		2				1		1			
Brown		1	1	7	5	12	32	30	62	53	40	93	5	1	6	3	1	4				3	2	5	1		1
Buffalo				4	3	7		5	5	1	7	8				1		1				2	1	3			
Burnett				1	2	3	1	3	4	5	3	8	1		1							1		1			
Calumet	1		1	4	1	5	5	2	7	2	4	6	2		2							1		1			
Chippewa		1	1	5	7	12	14	7	21	18	11	29		1	1											1	1
Clark				3	2	5	11	7	18	15	14	29	2		2							1	1	2			
Columbia	1		1	1	3	4	15	9	24	8	12	20	1	1	2								1	1			
Crawford				1	3	4	6	1	7	7	6	13	1	2	3		1	1									
Dane	4	1	5	9	4	13	34	20	54	43	38	81	2	2	4	4	5	9		1	1	5	1	6	1		1
Dodge		1	1	8	7	15	14	7	21	15	9	24	1	3	4	1	2	3				1	1	2	1		1
Door				6	2	8	5	2	7	4	13	17	1		1		1	1									
Douglas	1	1	2	5	1	6	21	12	33	22	22	44	1		1		2	2	1		1	1		1			
Dunn				2		2	15	14	29	14	19	33		1	1	1		1							1		1
Eau Claire	1	1	2	6	3	9	9	7	16	25	11	36	2	1	3	2		2				1		1			
Florence								1	1		2	2															
Fond du Lac	2		2	6	8	14	25	15	40	41	18	59	1	1	2				2	1	3		1	1	1		1
Forest								3	3	2	3	5										1		1			
Grant				3	4	7	15	9	24	8	13	21				1		1				1	2	3			
Green				5	1	6	5	6	11	19	17	36	2	1	3	2		2					1	1			
Green Lake					2	2	5	2	7	6	8	14				1		1									
Iowa				1	4	5	12	9	21	17	15	32	1	1	2		1	1									
Iron		1	1	3	1	4	3	1	4	8	4	12															
Jackson				4	1	5	12	7	19	4	8	12											3	3		1	1
Jefferson				8	7	15	10	11	21	17	14	31		4	4								2	2			
Juneau				1	2	3	3		3	15	17	32		1	1	1	1	2				1		1			

Kenosha	1		1	6	4	10	26	13	39	28	23	51	1	2	3	1		1	1		1		2	2			
Kewaunee				1	2	3	4	5	9	13	10	23		2	2	1		1					2	2			
La Crosse				11	8	19	12	25	37	34	33	67	4		4		1	1				1	1	2			
Lafayette	1		1	2	1	3	6	8	14	8	7	15		2	2		1	1					1	1			
Langlade							5	5	10	6	8	14	1	1	2							1		1			
Lincoln				2		2	2	4	6	15	9	24		2	2							2	1	3			
Manitowoc	1	1	2	13	8	21	15	13	28	21	16	37	2	4	6	2		2				4	3	7		1	1
Marathon				14	8	22	37	23	60	34	15	49		1	1		5	5				4		4			
Marinette				3		3	19	17	36	12	7	19	1	1	2							1		1			
Marquette				2	3	5	3	1	4		6	6		1	1												
Milwaukee	3	3	6	99	95	194	432	282	714	563	241	804	30	24	54	23	6	29	1		1	20	13	33	1	1	2
Monroe				3	4	7	12	16	28	15	12	27										3		3			
Oconto				2	3	5	4	11	15	10	10	20				1	1	2				2	3	5			
Oneida				1	1	2	5	2	7	2	8	10	1		1	1		1									
Outagamie				8	10	18	22	23	45	23	23	46	4	1	5	2	3	5				5	3	8			
Ozaukee				5	7	12	10	1	11	7	7	14	1		1							3		3			
Pepin				1		1	4	4	8	7	5	12															
Pierce	1		1	4	1	5	6	5	11	5	7	12										1	1	2			
Polk				4		4	11	11	22	10	10	20					1	1					2	2			
Portage	1		1	7	4	11	11	14	25	22	13	35								1	1	1	3	4			
Price				3	2	5	3	2	5	15	10	25															
Racine		1	1	15	5	20	48	36	84	62	30	92	2	1	3	1		1				1	5	6			
Richland	1		1	5	2	7	9	12	21	7	8	15				1		1				1		1			
Rock				16	14	30	34	25	59	76	26	102	2	3	5	1	1	2				3	1	4			
Rusk				1		1	6	3	9	13	7	20					1	1				2		2			
St. Croix				7	4	11	8	5	13	15	12	27		1	1							3		3			
Sauk				6		6	13	13	26	17	9	26	2	1	3	1		1				2		2		1	1
Sawyer				2	1	3	3		3	4	5	9															
Shawano	2		2	8	3	11	13	15	28	27	19	46										1	1	2			
Sheboygan		1	1	14	11	25	10	9	19	19	27	46	1	1	2		1	1				1	2	3	1		1
Taylor				2	1	3	2	4	6	9	6	15					1	1					1	1			
Trempealeau		1	1	5	2	7	10	7	17	11	6	17	3	1	4	3	2	5					1	1	1		1
Vernon				2	4	6	5	3	8	15	8	23				1		1				2	1	3			
Vilas				2	1	3	4	2	6	3	3	6					1	1									
Walworth	1		1	3	6	9	6	9	15	9	16	25	2		2	1	3	4									
Washburn	1		1		1	1	4	5	9	4	4	8															
Washington				4	2	6	12	10	22	19	18	37	1	1	2	1		1				1		1			
Waukesha	1	1	2	9	2	11	16	20	36	30	28	58	1		1								2	2			
Waupaca		1	1	2	2	4	10	6	16	30	27	57	1		1	2		2	1		1	3	1	4			
Waushara				6	4	10	7	7	14	7	9	16	1		1							1		1	1		1
Winnebago	1		1	4	6	10	22	27	49	41	28	69	1	2	3	1	3	4				2	1	3			
Wood		1	1	2		2	18	17	35	16	17	33	2	2	4	2	2	4				1	1	2		1	1
Total	25	17	42	405	313	718	1210	938	2148	1691	1155	2846	90	75	165	66	47	113	7	3	10	92	70	162	9	6	15

TABLE NO. 20.—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH

County	Other Diseases of the Respiratory System (Tuberculosis Excepted)			Diseases of the Mouth and Annexa			Diseases of the Pharynx and Tonsils			Diseases of the Esophagus			Ulcer of the Stomach and Duodenum			Other Diseases of the Stomach (Cancer Excepted)			Diarrhea and Enteritis (Under 2 Yrs. of age)			Diarrhea and Enteritis (2 Yrs. and Over)		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams							1		1				1	1	2	1		1	1		1	1	3	4
Ashland							1	2	3					2	2	3	1	4	6	10	16	3	4	7
Barron		2	2				3		3				1	1	2	4	4	8	7	8	15		7	7
Bayfield								1	1							1	3	4	5	4	9	1	1	2
Brown	2	1	3				1	9	10				3	3	6	4	7	11	21	19	40	6	4	10
Buffalo				1		1										2		2	3	4	7			
Burnett													1		1					1	1		1	1
Calumet		2	2					2	2					1	1	1	1	2	1	5	6		1	1
Chippewa							4	3	7				2		2	3	2	5	2	5	7	4	4	8
Clark							2		2							2	4	6	7	10	17	3	4	7
Columbia		1	1				3		3				2	4	6	1	2	3	3	2	5	1	3	4
Crawford				1		1	1	1	2					1	1	1		1		2	2	1	1	2
Dane	3		3	1	2	3	5	2	7				2	7	9	5	6	11	8	7	15	4	18	22
Dodge					1	1	1	1	2				1		1	9	1	10	8	6	14	5	12	17
Door								1	1					2	2	1		1	3	10	13		1	1
Douglas	2		2				3		3					1	1	3	2	5	11	6	17	3	4	7
Dunn		3	3		1	1										3	4	7		2	2	3	1	4
Eau Claire		1	1	1		1	4		4				3	1	4	3	2	5	12	11	23	7	4	11
Florence							1		1										3	1	4			
Fond du Lac	1		1					3	3				6	6	12	5	3	8	23	19	42	6	7	13
Forest														1	1	1	1	2	3	8	11	1		1
Grant		2	2	1		1	2	1	3				1	1	2	3	2	5	5	4	9	4	1	5
Green	1	1	2	1		1		2	2				2		2	3	3	6	1	6	7	3	3	6
Green Lake	1		1					1	1					1	1	1		1	1	2	3		3	3
Iowa	1		1										1	2	3	1	2	3	3	2	5	3	1	4
Iron	1	1	2	1		1										2	2	4	5	5	10	1	1	2
Jackson							1	1	2					1	1	2	1	3	2	5	7	2	1	3
Jefferson	2		2				1	1	2				5	2	7	4	3	7	11	10	21	5	9	14
	1		1				1		1				1	2	3	1	1	2	1	6	7		2	2

Kenosha	1	1	2		1	1	1	1	2				2	2	4	8	1	9	24	17	41	8	7	15
Kewaunee							2	1	3					2	2				3	7	10	1	2	3
La Crosse	1		1	1		1		3	3				3	8	11	2	3	5	2	12	14	1	6	7
Lafayette														1	1					1	1	1	4	5
Langlade							2	1	3							2	2	4	5	10	15	2	1	3
Lincoln													1	1	2	2	2	4	6	7	13	3	4	7
Manitowoc	1		1				2	2	4				2	1	3	3	2	5	12	16	28	2	7	9
Marathon		2	2				6	1	7				1	6	7	13	11	24	9	22	31	4	2	6
Marinette					2	2	1		1							3	2	5	10	23	33	7	8	15
Marquette																	1	1		2	2			
Milwaukee	9	8	17	3	4	7	24	19	43		4	4	12	20	32	47	56	103	237	208	445	68	55	123
Monroe								1	1				2	1	3	2		2	6	9	15	1	2	3
Oconto	1		1					2	2							2	2	4	9	23	32	3	1	4
Oneida																1	2	3	2	1	3	1	1	2
Outagamie	1	1	2		2	2		3	3				2	2	4	2	2	4	17	29	46	8	6	14
Ozaukee																2		2	1	1	2	4	1	5
Pepin								1	1				1		1					1	1		1	1
Pierce							1	1	2					1	1	1	2	3	1	4	5		5	5
Polk	1		1				2	1	3				1		1				7	1	8		2	2
Portage							1		1				3	3	6	6	2	8	6	24	30	3	14	17
Price																	1	1	1	4	5	4	5	9
Racine	2		2				4	8	12				2	1	3	7	8	15	24	24	48	7	3	10
Richland								2	2					2	2	4	2	6	4	6	10	3	5	8
Rock	3	2	5		3	3	2	2	4	1		1	3	1	4	5	7	12	15	10	25	12	8	20
Rusk														1	1				2	2	4	2		2
St. Croix		1	1				3	2	5				1		1	2	2	4	3	5	8		1	1
Sauk		1	1				2		2				1	2	3	3	4	7	8	9	17	2	5	7
Sawyer																1		1	3	3	6		2	2
Shawano	1		1				1	1	2		1	1	1	4	5	3		3	9	12	21	2	2	4
Sheboygan	1	1	2				2	3	5				1	3	4	5	3	8	19	16	35	4	8	12
Taylor	1		1				1		1					1	1		4	4	5	8	13	1	2	3
Trempealeau													1	1	2		2	2	5	2	7	5	1	6
Vernon								3	3								1	1	2	4	6	1	3	4
Vilas																			1	1	2	1		1
Walworth	1	1	2				1	1	2				2	1	3	4	2	6	2	1	3	2	2	4
Washburn														1	1	1		1	3	2	5	1	1	2
Washington	1		1				2	3	5				1		1	2	4	6	5	4	9	2	2	4
Waukesha	2		2		2	2	3	2	5				3		3	6	3	9	5	12	17	2	12	14
Waupaca					1	1								2	2	3		3	1	9	10	1	6	7
Waushara		1	1		1	1	1	3	4	1		1		1	1	1		1	2	2	4	1		1
Winnebago					1	1	3	6	9	1		1	2	4	6	4	6	10	9	13	22	5	10	15
Wood	2		2				1	2	3				1	1	2		2	2	6	16	22	2	6	8
Total	44	33	77	11	21	32	103	106	209	3	5	8	81	114	195	217	198	415	647	763	1410	244	314	558

TABLE NO. 20.—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH

County	Ankylostomiasis			Diseases Due to Other Intestinal Parasites			Appendicitis Typhlitis			Hernia, Intestinal Obstruction			Other Diseases of the Intestines			Acute Yellow Atrophy of the Liver			Hydatid Tumor of the Liver			Cirrhosis of the Liver			Biliary Calculi		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams								1	1		1	1		1	1								3	3			
Ashland							6	5	11	1	6	7	2	2	4								1	1	1	2	3
Barron							8	4	12	1	3	4											2	2	1	4	5
Bayfield																							2	2	1		1
Brown							23	19	42	6	8	14	1		1							4	3	7	5	14	19
Buffalo							2		2	2		2											1	1			
Burnett								2	2					1	1												
Calumet							3	1	4	1		1										2	4	6			
Chippewa							19	15	34	4	6	10					1	1				1		1	1	2	3
Clark							1	1	2	1	2	3					1	1				1	1	2	1	1	2
Columbia							7	6	13	1	5	6		1	1							2		2		5	5
Crawford							2	3	5	1	4	5										1	1	2		1	1
Dane							10	20	30	13	16	29	2		2	1		1				5	7	12	6	10	16
Dodge							3	6	9	3		3	1	1	2							2	3	5	2	1	3
Door							1	6	7	2	5	7										2	2	4			
Douglas							9	6	15	6	6	12	1		1		1	1				2	3	5	2	1	3
Dunn							4	7	11	3	1	4	1		1							1		1	1		1
Eau Claire							13	9	22	7	7	14		1	1							3	1	4	3	2	5
Florence																											
Fond du Lac							13	9	22	7	11	18	2	1	3	1		1	1		1	5		5	3	4	7
Forest							1		1	1		1															
Grant							7	3	10	5	3	8		2	2								2	2	1	2	3
Green							4	5	9	1	4	5		1	1				1		1	2	4	6	2		2
Green Lake								1	1		1	1														1	1
Iowa							4	4	8	5	1	6										3	1	4	2	3	5
Iron							1		1		1	1															
Jackson							1		1	3		3															
Jefferson							6	7	13	5	8	13	1		1		1	1				1	4	5		1	1
Juneau							1	4	5	1	2	3													1	2	3

Kenosha							5	6	11	8	5	13	2		2							2	5	7		1	1
Kewaunee							1	4	5		1	1										1	2	3	2	2	4
La Crosse							10	14	24	12	8	20	1		1							4	3	7	5	3	8
Lafayette							6	3	9		1	1										3	5	8	1		1
Langlade							3	9	9	3	1	4										1	2	3	1	1	2
Lincoln							2	3	5	2	3	5											1	1			
Manitowoc							9	9	18	11	5	16		2	2		2	2				5	4	9	1	3	4
Marathon							12	7	19	9	9	18	1	2	3							3	3	6	1	3	4
Marinette							3	3	6	7	1	8										1	3	4			
Marquette								2	2	3	1	4										2		2			
Milwaukee	1		1	1	1	2	67	80	147	52	53	105	13	6	19	3	4	7	2	1	3	65	51	116	16	28	44
Monroe							3	5	8	10	3	13											3	3		1	1
Oconto							3	1	4	1	2	3													1	1	2
Oneida							5	1	6	2	2	4		1	1							3		3		1	1
Outagamie							14	19	33	11	6	17		4	4		1	1				7	5	12	2	6	8
Ozaukee										4	1	5										2	1	3			
Pepin							1		1														1	1			
Pierce							2		2	3	3	6										1	2	3	1		1
Polk							2	2	4	2	3	5		1	1							1	1	2		1	1
Portage							5	6	11	5	4	9	1		1							3	4	7	2	2	4
Price							3		3	2	1	3															
Racine							10	5	15	5	9	14	2	3	5							4	3	7	2	6	8
Richland								1	1	1	2	3								1	1		1	1			
Rock							16	14	30	4	7	11	2		2		1	1		1	1	2		2	5	3	8
Rusk							1	4	5	3	2	5										2		2			
St. Croix							2	1	3	2	3	5	1		1	1		1				1	1	2			
Sauk							2	2	4	4	5	9	1		1							3	3	6		1	1
Sawyer				1		1	1		1	2	2	4															
Shawano							1	3	4	1	3	4	2		2							2	4	6		1	1
Sheboygan							9	10	19	4	3	7	2		2	1		1				5	6	11	5	3	8
Taylor							1	3	4	1	2	3															
Trempealeau							3	4	7		3	3	1		1							4	1	5	2	1	3
Vernon							1		1	2		2				2		2				2		2		2	2
Vilas							1		1		2	2															
Walworth								4	4	4	1	5	2		2		1	1				1	4	5	2		2
Washburn																						1		1			
Washington							6	2	8	3	2	5		3	3							1	1	2		2	2
Waukesha							4	6	10	5	3	8											1	1	3	5	8
Waupaca								5	5	1	5	6		1	1							5	3	8	1	2	3
Waushara										3	3	6											1	1			
Winnebago							14	11	25	15	6	21		3	3							5	5	10	5	7	12
Wood							12	13	25	5	5	10	1		1							1	2	3		5	5
Total	1		1	2	1	3	389	406	795	292	282	574	43	37	80	9	13	22	4	3	7	180	177	357	91	147	238

TABLE NO. 20.—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH

County	Other Diseases of the Liver			Diseases of the Pancreas			Peritonitis Without Specified Cause			Other Diseases of the Digestive System (Cancer and Tuberculosis Excepted)			Acute Nephritis			Chronic Nephritis			Chyluria			Other Diseases of the Kidneys and Annexa			Calculi of the Urinary Passages		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams																4	1	5									
Ashland	2		2				1	1	2					1	1	10	13	23					1	1			
Barron	3	2	5										1		1	24	22	46									
Bayfield		1	1													6	4	10									
Brown	3	7	10							1	1	2	4	6	10	52	46	98				1		1	1		1
Buffalo	2		2													4	4	8									
Burnett																5	4	9					1	1			
Calumet		1	1											1	1	7	6	13									
Chippewa	4	1	5				1		1				1	2	3	12	26	38					1	1		1	1
Clark	1		1										1		1	16	16	32				1		1			
Columbia	4	1	5				1	1	2				2	1	3	16	21	37					2	2			
Crawford	3	2	5													13	15	28									
Dane	7	10	17				2	2	4	1		1	3		3	56	44	100				3	1	4			
Dodge	2	1	3											1	1	34	26	60									
Door	1		1													17	9	26									
Douglas	1	4	5		1					2		2				23	15	38				1	2	3	1		1
Dunn	1		1										1	1	2	13	10	23									
Eau Claire	3	5	8		1		3		3	1		1	3	2	5	16	19	35				1	1	2			
Florence		1	1											1	1	1	4	5									
Fond du Lac	2	1	3							2		2				23	36	59				1	1	2	3		3
Forest																2	4	6									
Grant	2	1	3										4	1	5	23	30	53				1	2	3			
Green										1		1	1	1	2	11	11	22									
Green Lake		1	1											1	1	8	8	16					1	1			
Iowa	1	2	3										1	3	4	12	19	31					1	1			
Iron		1	1										1		1	1	3	4									
Jackson							1		1				1		1	9	6	15									

Jefferson	1	2	3										1	1	2	17	14	31				1		1				
Juneau	2		2										1	1	2	9	11	20										
Kenosha	2	2	4		1								5	2	7	18	17	35					1	1				
Kewaunee								1	1					1	1	11	11	22										
La Crosse	1	5	6		1		3	2	5	1	2	3	2	4	6	37	41	78				3		3				
Lafayette	1	1	2		1								2		2	9	14	23										
Langlade													1		1	4	3	7					1	1				
Lincoln	1		1				1		1				1	1	2	2	11	13				1	1	2				
Manitowoc	1	1	2										2	1	3	28	25	53				3	2	5		1	1	
Marathon	2	2	4					3	3				2	10	12	23	20	43				1	3	4				
Marinette	1		1				1		1							23	29	52								1	1	
Marquette		1	1													10	5	15										
Milwaukee	27	18	45		2		7	5	12		6	6	24	31	55	317	282	599				15	8	23				
Monroe	1	1	2										2		2	20	23	43					1	1				
Oconto					1									1	1	19	16	35				1		1				
Oneida								1	1	1	1	2		1	1	2	14	16										
Outagamie	2	1	3		1			1	1		1	1	3	6	9	22	29	51				3		3				
Ozaukee	1	2	3					1	1					1	1	10	17	27										
Pepin														1	1	4	8	12							1		1	
Pierce	1	3	4		1								2	1	3	17	14	31										
Polk	1	1	2										1		1	13	18	31					1	1				
Portage	1		1										3	1	4	8	9	17				1		1	1		1	
Price		1	1								2	2	1		1	5	7	12										
Racine	3		3		2		2		2		1	1	6	1	7	56	45	101				2	1	3				
Richland													2	4	6	8	15	23										
Rock	1	3	4		2		1		1	1		1	3	1	4	35	32	67							1		1	
Rusk													1	1	2	2	4	6										
St. Croix	1		1										2	4	6	15	9	24					1	1				
Sauk	3		3										1		1	29	13	42					1	1				
Sawyer																1	1	2				1		1				
Shawano	4	3	7										2	2	4	17	15	32				1		1				
Sheboygan	5	3	8		2					1		1	3	1	4	30	32	62					1	1				
Taylor	1	3	4										1	1	2	6	1	7										
Trempealeau	1		1				1		1				2	2	4	9	7	16										
Vernon	3	2	5				1		1				1	1	2	19	16	35					1	1				
Vilas													1		1	2	1	3										
Walworth		1	1					1	1							26	29	55				1		1				
Washburn																4	6	10										
Washington													1		1	8	14	22					1	1				
Waukesha	1	1	2				1	1	2	1	1	2	3	2	5	24	41	65				3		3				
Waupaca		1	1										2	3	5	31	19	50										
Waushara																10	12	22					1	1		1	1	
Winnebago	3	6	9										2	2	4	32	47	79				1	1	2				
Wood	2	3	5								2	2		1	1	12	10	22				3	2	5				
Total	116	109	225		16		27	20	47	13	17	30	110	112	222	1422	1429	2851				50	42	92	8	4	12	

TABLE NO. 20.—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH

County	Diseases of the Bladder			Diseases of the Urethra, Urinary Abscess, etc.			Diseases of the Prostate			Non-Venereal Diseases of the Male Genital Organs			Cysts and Other Benign Tumors of the Ovary			Salpingitis and Pelvic Abscess			Benign Tumors of the Uterus			Non-Puerperal Uterine Hemorrhage			Other Diseases of the Female Genital Organs		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams								1	1																		
Ashland																1		1				2		2	1	1	2
Barron							1	2	3																1	1	2
Bayfield																											
Brown					1	1	9	4	13								5	5	1	1	2				2	1	3
Buffalo							1		1							1		1									
Burnett								1	1																		
Calumet																1		1									
Chippewa							2	3	5					2	2		1	1	1	1	2		1	1	1	1	2
Clark								4	4											1	1						
Columbia								1	1														1	1		1	1
Crawford																1		1									
Dane	1	1	2				9	4	13					3	3		1	1	2	3	5					2	2
Dodge	3		3				1	3	4					1	1												
Door		1	1				1	3	4					1	1												
Douglas				1		1		1	1				1		1				1		1					2	2
Dunn																											
Eau Claire	1		1				3	3	6							2	2	4	5	1	6						
Florence																											
Fond du Lac	2		2				1	2	3				2		2										1	1	2
Forest																				1	1						
Grant		1	1				1	2	3											3	3						
Green		2	2				3	1	4				1		1												
Green Lake								1	1																		
Iowa	1		1					2	2																		
Iron																											
Jackson	1		1				4	1	5																		
Jefferson							5	3	8								1	1		1	1						

Juneau							2	2	4																		
Kenosha	1		1				2	2	4																		
Kewaunee							2		2																		
La Crosse		2	2				4	8	12								1	1	1	1	2					1	1
Lafayette							1	1	2		1	1	1		1												
Langlade	1		1					1	1				2		2	1		1									
Lincoln							1		1																	2	2
Manitowoc	3	2	5				1	5	6							1		1	2		2	1	1	2	2	1	3
Marathon								2	2				1		1								1	1		1	1
Marinette	1	1	2				1	3	4										1		1					1	1
Marquette					1	1		1	1					1	1												
Milwaukee	17	12	29		1	1	17	15	32		3	3	3	1	4	6	8	14	10	3	13		1	1	3	9	12
Monroe																			1	1	2						
Oconto								1	1																		
Oneida																											
Outagamie	3		3				2	3	5										1		1				1		1
Ozaukee	1		1																								
Pepin							1		1																		
Pierce		1	1					2	2					1	1											1	1
Polk							3	2	5																		
Portage		2	2				4	1	5							1	1	2									
Price																									1		1
Racine							3	2	5		1	1											1	1	1		1
Richland							1		1													1		1			
Rock	4	3	7				6	8	14							1	1	2	3	2	5				1		1
Rusk	1	1	2					2	2																		
St. Croix		1	1																								
Sauk	3		3					3	3																		
Sawyer	1		1																								
Shawano	2	1	3																								
Sheboygan	1		1				2	4	6		1	1	1	1	2				1	1	2						
Taylor								1	1	1		1	1		1												
Trempealeau		1	1					1	1											1	1						
Vernon	1		1				2		2					1	1												
Vilas																											
Walworth							2	1	3											1	1		1	1		1	1
Washburn																											
Washington							2		2					2	2				3	1	4				1		1
Waukesha								2	2																1		1
Waupaca		1	1		1	1	3	1	4				1		1												
Waushara	2		2				3		3																1		1
Winnebago	1	3	4				1	7	8					1	1	3	2	5	1	2	3					1	1
Wood		1	1				3	4	7				1	2	3	1		1							1	1	2
Total	52	37	89	1	4	5	110	127	237	1	6	7	15	17	32	20	23	43	34	25	59	4	7	11	19	29	48

TABLE NO. 20.—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH

County	Non-Puerperal Diseases of the Breast			Accidents of Pregnancy			Puerperal Hemorrhage			Other Accidents of Labor			Puerperal Septicemia			Puerperal Phlegmasia Alba Dolans, Embolus, Sudden Deaths			Puerperal Albuminuria and Convulsions			Following Child-birth (Not Otherwise Defined)			Puerperal Diseases of the Breast		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams													1		1				1	1	2						
Ashland				1	2	3					1	1	1		1				1	3	4						
Barron							2		2		1	1	4	2	6		1	1	2		2						
Bayfield								1	1	1		1		1	1												
Brown							1	2	3	1		1	5	8	13	3	1	4	3	4	7						
Buffalo													1	1	2												
Burnett											1	1	1		1				2	1	3		1	1			
Calumet										1		1								1	1						
Chippewa							1		1				3	1	4				1	1	2						
Clark					1	1	1	1	2				2		2												
Columbia					1	1				1		1		2	2				2		2						
Crawford								1	1					1	1				2	1	3						
Dane				2		2		1	1		1	1	3	7	10		1	1	4	4	8						
Dodge					1	1				2		2	2	4	6												
Door							1		1					1	1	1		1		1	1						
Douglas								2	2	1	2	3	1	2	3				3	2	5						
Dunn													1	2	3	1		1		1	1						
Eau Claire							1	1	2				2	3	5	1		1		1	1						
Florence						1		1																			
Fond du Lac				1		1	1		1				1	2	3		2	2	7	1	8						
Forest				1		1				1	1	2															
Grant					1	1				1		1	1	1	2		1	1	1	2	3						
Green					1	1								2	2	1		1		2	2						
Green Lake								2	2					1	1	1	1	1	1	1	2						
Iowa													4	2	6					1	1						
Iron								1	1					2	2												
Jackson													1	1	2		1	1	1		1						
Jefferson							1		1				1	2	3				1	1	2						

Juneau										1		1	2		2				1		1						
Kenosha				2	1	3		1	1	2	1	3	2	1	3				3		3						
Kewaunee																											
La Crosse				3	1	4		1	1	2	1	3	1	3	4		2	2		4	4						
Lafayette				1	1	2				1		1		2	2				1	1	2						
Langlade							1		1				4	3	7				1		1						
Lincoln								1	1	1	1	2	2	2	4		1	1	1	2	3						
Manitowoc				1		1		2	2	2	1	3	1	2	3					1	1						
Marathon					1	1	1	1	2		2	2	2	2	4		2	2		5	5						
Marinette					1	1	1	1	2	2		2	1	1	2		1	1	1		1						
Marquette																	1	1									
Milwaukee		1	1	9	8	17	12	9	21	4	10	14	34	26	60	4	7	11	15	27	42		2	2			
Monroe													1		1				1		1						
Oconto							1		1				1		1												
Oneida				1	1	2	2		2		1	1		1	1					1	1						
Outagamie				1	2	3				1		1	2	3	5	2		2		3	3						
Ozaukee										1		1							1	1	2						
Pepin											1	1															
Pierce														3	3				1	3	4						
Polk					2	2	1		1	1		1	4	1	5					1	1						
Portage							2	2	4				2		2		1	1	2		2						
Price								1	1	1	1	2		1	1					2	2						
Racine				1	2	3	2		2	3	3	6	4	3	7		1	1	1	2	3						
Richland							1		1				2	1	3				1	1	2						
Rock				1	1	2				1	2	3	3	2	5				5	3	8						
Rusk																1		1									
St. Croix					1	1		1	1	1	1	2		1	1				1		1		1	1			
Sauk								1	1	1		1	3	2	5				2		2						
Sawyer																											
Shawano				1	1	2	1	2	3	1	2	3		1	1	1	1	2	1	2	3						
Sheboygan							1		1	1		1	2	3	5				1	2	3						
Taylor				1		1	1		1				2		2	1		1									
Trempealeau							1		1		1	1															
Vernon							2	1	3				2		2							1		1			
Vilas																			1		1						
Walworth								1	1					1	1												
Washburn													1		1				1	1	2						
Washington				1		1	1		1				1		1				1	1	2						
Waukesha								1	1				4	2	6	1		1	1	1	2						
Waupaca													1	1	2		2	2	1		1						
Waushara										2		2		1	1					1	1						
Winnebago				2		2	2	2	4	1		1	1	1	2	1	1	2	2		2						
Wood				1		1	1	1	2	1	1	2	2	2	4				2		2						
Total		1	1	31	30	61	44	41	85	40	36	76	122	120	242	19	27	46	81	94	175	1	4	5			

TABLE NO. 20.—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH

County	Gangrene			Furuncle			Acute Abscess			Other Diseases of the Skin and Annexa			Diseases of the Bones (Tuberculosis Excepted)			Diseases of the Joints (Tuberculosis and Rheumatism Excepted)			Amputations			Other Diseases of the Organs of Locomotion			Congenital Malformations (Still-births not Included)		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	ot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams	1		1																							4	4
Ashland	1		1								1	1											1	1	3	4	7
Barron		3	3							1	1	2	2	1	3	1		1							3	2	5
Bayfield		1	1																						3	2	5
Brown	1	3	4	7	3	10		2	2	3	3	6	2	2	4										18	12	30
Buffalo		1	1							1		1													1	1	2
Burnett																										2	2
Calumet		1	1																						3	1	4
Chippewa		3	3	1		1					1	1	1	1	2										2	4	6
Clark	1		1																						1	2	3
Columbia	3	2	5							1		1	1		1	1		1							4	[illegible]	7
Crawford	1		1																						4	[illegible]	5
Dane	5	2	7	1	1	2				2		2	5	1	6								1	1	15	11	26
Dodge	2	2	4	1		1		1	1					1	1											5	5
Door		1	1					1	1																3	2	5
Douglas	2	1	3					2	2	4	2	6	2		2	1		1							2	10	12
Dunn					1	1		1	1																1	3	4
Eau Claire	1		1										2	1	3		1	1							3	3	6
Florence																											
Fond du Lac	2	1	3							2		2								1	1				10	7	17
Forest		1	1																								
Grant	1		1				2	1	3				1	1	2					1	1				4	2	6
Green														1	1										2	2	4
Green Lake		1	1	1		1				1		1														1	1
Iowa	3		3																						1	7	8
Iron																1		1							1		1
Jackson		1	1	1		1							1		1										3		3

Jefferson	4	2	6		1	1	1		1	1	1	2	1		1										1	3	4
Juneau	1		1																			1		1	3	2	5
Kenosha		3	3	1		1	1		1				1	1	2										5	7	12
Kewaunee		1	1				1		1																2	1	3
La Crosse	1	2	3		3	3				1	5	6	3		3										4	6	10
Lafayette	1		1							1		1	1	1	2										2		2
Langlade		1	1								1	1	1	1	2										1	4	5
Lincoln		2	2										1	1	2										5	3	8
Manitowoc	3	3	6	1		1					1	1	3	2	5										11	10	21
Marathon	1	2	3							1	1	2													14	14	28
Marinette		1	1													1		1							2	6	8
Marquette				1		1					1	1													2		2
Milwaukee	8	13	21	1	5	6	2	6	8	4	9	13	19	5	24	2	4	6					2	2	47	66	113
Monroe	2	1	3				1	1	2																3	2	5
Oconto								1	1																2	2	4
Oneida	1	1	2				1		1																2	1	3
Outagamie	1	1	2	1	1	2	2		2	1	1	2	1	1	2										6	8	14
Ozaukee	3	1	4																1		1				1	1	2
Pepin																										1	1
Pierce	1	2	3																						2	4	6
Polk	1		1				1		1				2		2										2	3	5
Portage		2	2							1	1	2													9	3	12
Price											2	2													2	4	6
Racine	1		1		1	1				2		2	1	1	2	1		1					1	1	9	7	16
Richland	2		2							1		1													1	2	3
Rock	4	2	6								1	1	1	1	2		1	1	1		1				9	11	20
Rusk														1	1										3	6	9
St. Croix	1		1							1		1	1	1	2										1	2	3
Sauk	1	1	2				1	1	2	1		1	1	1	2										6	1	7
Sawyer																									1	1	2
Shawano	2	1	3							2		2	2		2										3	3	6
Sheboygan		1	1		1	1		2	2	2	1	3													5	4	9
Taylor																										3	3
Trempealeau	2		2										2		2					1	1					1	1
Vernon		1	1				1		1	1	1	2	1		1										5	2	7
Vilas																									2	1	3
Walworth										1		1					1	1							7	2	9
Washburn														1	1										2		2
Washington	2		2		1	1	1		1																8	4	12
Waukesha		1	1	1		1	1		1		1	1	2	1	3		1	1							5	1	6
Waupaca	1	5	6										2	1	3		1	1							9	3	12
Waushara																									1	3	4
Winnebago	1	3	4		1	1		1	1	1	1	2	1	1	2										10	4	14
Wood		1	1				2	1	3	1	2	3	5	3	8										7	6	13
Total	69	78	147	18	19	37	18	21	39	38	38	76	69	33	102	8	9	17	2	3	5	1	5	6	309	309	618

TABLE NO. 20.—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH

County	Congenital Debility, Icterus and Sclerema			Premature Birth; Injury at Birth			Other Diseases Peculiar to Early Infancy			Lack of Care			Senility			Suicide by Solid or Liquid Poisons			Suicide by Corrosive Substances			Suicide by Poisonous Gas			Suicide by Hanging or Strangulation		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams		1		4	3	7							3	3	6												
Ashland		7		15	13	28	4	3	7				10	4	14											1	1
Barron		1		28	22	50	2	3	5				6	9	15					1	1					1	1
Bayfield		1		11	4	15		1	1				6	5	11										1		1
Brown		11		56	41	97	2	4	6				30	18	48	2	1	3							1		1
Buffalo		2		6	5	11	2	2	4				6	3	9											1	1
Burnett		3		6	3	9	2		2				4	8	12											1	1
Calumet		5		6	12	18	3	3	6				3	4	7										1		1
Chippewa		3		16	10	26	1	2	3				22	17	39	1		1							2	2	4
Clark		4		15	12	27	3	1	4				9	7	16										2	2	4
Columbia		2		7	8	15	6	5	11				9	14	23	1		1							1	3	4
Crawford		1		11	9	20	4	3	7				13	5	18		1	1									
Dane		12		30	40	70	13	4	17				36	29	65	4	1	5					1	1	1	2	3
Dodge		5		13	19	32	5	5	10				10	24	34		3	3							3		3
Door		4		14	7	21	5	4	9				10	15	25											4	4
Douglas		8		31	26	57	4	5	9				7	14	21	1		1								5	5
Dunn		1		23	20	43	3	3	6				14	15	29											2	2
Eau Claire		2		21	24	45	10	2	12				13	19	32										3	1	4
Florence				1		1	1	1	2				2	2	4												
Fond du Lac		6		33	36	69	10	6	16				14	21	35	2	1	3							2	5	7
Forest		2		4	5	9	4	3	7	1		1		1												1	1
Grant		6		24	13	37	3	2	5				10	22	32	1		1							2	2	4
Green		3		8	8	16	4	1	5				14	17	31	2	1	3							3		3
Green Lake		2		7	10	17		1	1				15	12	27		1	1								1	1
Iowa		4		7	11	18	4	5	9				7	12	19	1	1	2							1	1	2
Iron		4		9	4	13	1	2	3				3	2	5		1	1								1	1
Jackson		2		5	7	12	1	1	2				6	5	11		1	1							2		2
Jefferson		8		11	10	21	2	1	3				8	14	22	1	1	2							1	1	2
Juneau		3		6	10	16	2	1	3				5	11	16										1		1
Kenosha		3		35	28	63	8	7	15	1		1	9	9	18								1	1	1	1	2

Kewaunee		1		11	7	18							8	15	23												
La Crosse		9		36	32	68	10	3	13				15	20	35										1	3	4
Lafayette		2		14	8	22	2	3	5				8	3	11	1		1								1	1
Langlade		3		15	19	34	4	4	8				6	9	15											1	1
Lincoln		2		8	13	21	6	3	9				4	9	13	1		1								1	1
Manitowoc		7		39	24	63	13	11	24				10	10	20		1	1							1	1	2
Marathon		13		44	39	83	11	3	14				24	27	51	1	2	3							1	2	3
Marinette		4		20	12	32	4	1	5				9	6	15		1	1								2	2
Marquette		1		6		6		1	1					6	6										1		1
Milwaukee		80		346	307	653	115	94	209		1	1	131	93	224	8	17	25				10	23	33	27	25	52
Monroe		9		18	15	33	4	2	6				12	12	24												
Oconto				13	11	24		2	2				7	13	20	1		1							2	1	3
Oneida		4		5	13	18	3	1	4				9	5	14											1	1
Outagamie		9		30	31	61	6	6	12				18	18	36										1	1	2
Ozaukee		2		10	6	16	2	1	3				11	6	17												
Pepin				2	5	7							3	1	4												
Pierce		1		7	12	19	1	1	2				8	8	16										1	2	3
Polk				18	14	32	2		2				4	1	5		1	1									
Portage		7		22	35	57	4		4	1		1	15	17	32										2		2
Price		7		6	9	15	1	1	2				1	4	5											2	2
Racine		12		38	37	75	12	7	19				33	20	53	1		1					3	3	5	3	8
Richland		2		9	10	19	2	2	4				4	3	7												
Rock		6		41	46	87	5	4	9				32	19	51	1		1				1	1	2	4	4	8
Rusk		3		4	3	7	3	1	4				1	2	3											2	2
St. Croix				18	9	27	4	3	7				9	10	19	1		1								2	2
Sauk		6		15	9	24	4		4				11	12	23	1		1							1		1
Sawyer		3		4	1	5	1	2	3				1		1												
Shawano		6		15	21	36	11	8	19		1	1	4	9	13											1	1
Sheboygan		9		35	29	64	8	6	14				15	19	34		2	2					1	1	5	8	13
Taylor		4		12	8	20	3	2	5				2	4	6										1		1
Trempealeau		5		15	11	26	2		2				5	9	14										2		2
Vernon		7		25	26	51							17	14	31	1	1	2							4	1	5
Vilas		4		5	3	8								6	6												
Walworth		4		8	13	21	4		4				21	10	31	1		1								1	1
Washburn		1		7	3	10	2		2				5	6	11												
Washington		3		9	9	18	4	2	6				12	4	16		2	2								2	2
Waukesha		6		23	21	44	2	4	6				15	19	34		1	1							2	4	6
Waupaca		8		15	19	34	2	1	3				19	22	41												
Waushara		3		13	3	16	2		2				8		8		1	1							1		1
Winnebago		11		31	48	79	19	3	22				36	26	62	1	2	3							2	1	3
Wood		7		23	23	46	7	5	12				14	13	27										1		1
Total		387		1498	1384	2882	394	268	662	3	2	5	871	851	1722	35	44	79		1	1	11	30	41	93	110	203

TABLE NO. 20.—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH

County	Suicide by Drowning			Suicide by Firearms			Suicide by Cutting or Piercing Instruments			Suicide by Jumping from High Places			Suicide by Crushing			Other Suicides			Poisoning by Food			Poisoning by Venomous Animals			Other Acute Accidental Poisonings (Gas Excepted)			Conflagration		
	1902	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams																									1		1			
Ashland				3	3	6		2	2											1	1					1	1			
Barron	1		1				1		1																2		2	1		1
Bayfield	1		1	1	2	3										1		1												
Brown		1	1	1	1	2	1	1	2		1	1							1	1	2					1	1			
Buffalo				1	3	4																								
Burnett																				1	1					1	1	3		3
Calumet								1	1																1		1			
Chippewa		1	1	1		1														2	2									
Clark					4	4														1	1									
Columbia		1	1					1	1																					
Crawford				2		2																								
Dane				6	1	7					1	1							1		1				1		1			
Dodge		1	1	3	2	5		1	1																	1	1			
Door		1	1		1	1																								
Douglas				3	2	5	2		2		1	1							1		1				2		2		1	1
Dunn				2		2														1	1									
Eau Claire					2	2																				1	1			
Florence																														
Fond du Lac	1		1	1	1	2	2		2											1	1				2		2			
Forest																														
Grant				6		6		1	1								2	2	2	1	3									
Green								1	1											2	2				1		1			
Green Lake																														
Iowa				1	1	2	2		2																	1	1			
Iron		1	1		1	1	1		1																	1	1			
Jackson				1	2	3	1		1																			1		1
Jefferson				2	1	3													1		1									
Juneau					1	1																			3		3			

Kenosha		1	1	2	1	3		1	1							1	1	2		1	1				2		2	2		2
Kewaunee					1	1										1		1												
La Crosse				3	3	6																								
Lafayette																			1		1									
Langlade					4	4		1	1										1		1					1	1			
Lincoln				1		1																								
Manitowoc	1	3	4	1		1																								
Marathon	1			2	1	3																			1	1	2			
Marinette				2	1	3		1	1										2		2				1		1		2	2
Marquette					1	1																								
Milwaukee	3	14	17	14	20	34	3	8	11	2	2	4				2	1	3	1	4	5				6	2	8	3	1	4
Monroe		1	1		1	1																								
Oconto					3	3														1	1				1		1			
Oneida					5	5	1		1																1	1	2		1	1
Outagamie				1	1	2	1	1	2										2		2									
Ozaukee				1	1	2																								
Pepin				1		1																								
Pierce				2		2														1	1				1		1			
Polk					1	1													1	2	3									
Portage				3		3													1	3	4				1	1	2		1	1
Price				1	3	4		1	1																					
Racine	3	1	4	1	3	4	1		1											2	2				1		1		1	1
Richland					2	2																								
Rock	2		2	2	1	3	1		1																					
Rusk	1		1	1		1										1		1										3		3
St. Croix		1	1					1	1																					
Sauk	1		1	1	1	2										1		1												
Sawyer				1		1																								
Shawano					2	2																			1	3	4	1	3	4
Sheboygan		2	2		1	1		1	1																1	1	2			
Taylor					2	2																							3	3
Trempealeau					1	1																				1	1	2		2
Vernon				1	2	3																								
Vilas					1	1																								
Walworth				2		2														2	2							6		6
Washburn																			1		1									
Washington				2		2														1	1					1	1			
Waukesha	1	2	3		2	2	1	1	2																2		2			
Waupaca								1	1		1	1				1		1								1	1			
Waushara				1	2	3																								
Winnebago				2	3	5		2	2																					
Wood					3	3											1	1	4		4				1		1		1	1
Total	16	31	47	82	101	183	18	27	45	2	6	8				8	5	13	20	28	48				33	20	53	22	14	36

TABLE No. 20—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH.

County	Accidental Burns (Conflagration Excepted)			Accidental Mechanical Suffocation			Accidental Absorption of Irrespirable or Poisonous Gas			Accidental Drowning			Accidental Traumatism by Firearms			Accidental Traumatism by Cutting or Piercing Instruments			Accidental Traumatism by Fall			Accidental Traumatism in Mines or Quarries			Accidental Traumatism by Machines		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams	1		1				1	1	2	4		4							1		1						
Ashland		1	1							3	2	5	2		2				3	3	6				1		1
Barron	2		2							6	8	14							3	1	4					1	1
Bayfield	1		1					1	1	2	2	4	2		2				1	1	2						
Brown	3	3	6					4	4	3	2	5	1		1				7	10	17				5		5
Buffalo		1	1							1	2	3							2	2	4						
Burnett		2	2							3	2	5		1	1					1	1						
Calumet											1	1							1	2	3						
Chippewa	2		2					1	1	2		2		1	1				3		3					1	1
Clark	1	2	3							1	5	6		1	1				1	2	3					1	1
Columbia	2	1	3					1	1	2	1	3	1		1				2	2	4						
Crawford										2	1	3		1	1				1		1						
Dane	5	8	13				3	1	4	7	7	14	2	2	4				4	6	10				7	2	9
Dodge	2	1	3				1		1	2	6	8							4	1	5				2	2	4
Door							1		1		2	2															
Douglas	2	3	5		1		1	2	3	11	15	26	1		1				4	5	9				2	1	3
Dunn	1	1	2					2	2	1	4	5							1		1				1		1
Eau Claire		1	1		1		4	1	5	3		3							4	3	7				2	1	3
Florence										1		1		1	1												
Fond du Lac	1	1	2				2	1	3	2	3	5	1		1				7	4	11				1	1	2
Forest											1	1	1	1	2												
Grant	2	5	7					1	1	4	1	5					1	1	3	5	8	4	1	5	3		3
Green							7	1	8	2	2	4							2	2	4				1		1
Green Lake	1		1								1	1							2	1	3					1	1
Iowa		2	2				1	1	2	1		1							1	5	6	1		1	1		1
Iron	1	2	3				1		1				1	2	3							1		1			
Jackson	1	1	2							2		2	1	1	2				2	2	4						

Jefferson		3	3				1		1	1	1	2	1	1	2				8	3	11				1	2	3
Juneau		1	1								1	1					1	1	1	3	4						
Kenosha	5	5	10		1					3	11	14	1	2	3				4	4	8				1	1	2
Kewaunee	1		1								1	1		1	1	1		1	2	1	3						
La Crosse	3	3	6		1		3	1	4	4	7	11							7	5	12		1	1		1	1
Lafayette	2	1	3							1	2	3				1		1									
Langlade	1		1							1		1	1	1	2				1	2	3						
Lincoln	1	1	2					1	1	3	3	6	2		2				1		1				1		1
Manitowoc	8	1	9					1	1	3	7	10							7	1	8				2	2	4
Marathon	1	3	4					1	1	5	10	15	2	5	7				5	5	10	1		1	1	2	3
Marinette	2		2				1	1	2	4	5	9	5	2	7				2		2				1	1	2
Marquette										1		1							1		1						
Milwaukee	18	21	39		3		24	16	40	19	43	62	1	3	4		1	1	51	53	104		1	1	7	8	15
Monroe		3	3								2	2		1	1				2	3	5						
Oconto	1		1							1	4	5	2		2				3		3				1	2	3
Oneida		2	2							1	3	4	2	4	6				1		1						
Outagamie	2	1	3		1					5	1	6	1	1	2		1	1	11	6	17				4	2	6
Ozaukee	2		2							4	4	8	1	2	3				2	1	3						
Pepin										2		2		1	1												
Pierce		2	2				1		1	2	3	5	1		1					3	3					1	1
Polk								1	1	1	3	4							2	1	3						
Portage	2	1	3				1		1	2	4	6							1	1	2					2	2
Price	4	1	5								3	3	1	5	6					1	1		1	1	1	2	3
Racine	4	1	5							3	12	15	1	2	3		1	1	6	4	10		1	1	2	1	3
Richland		3	3							1	6	7					1	1	1	2	3				1		1
Rock	5	3	8				2	3	5	8	7	15							15	7	22		1	1	4	2	6
Rusk	1		1				2		2	5	1	6	1		1		1	1	1	1	2						
St. Croix	1		1							1	6	7							5	4	9				2	1	3
Sauk	1		1					1	1	3	5	8		1	1				6	4	10		1	1		1	1
Sawyer										3		3	1		1				1		1						
Shawano	4		4					2	2		2	2							1	1	2						
Sheboygan	3	2	5		1		3	3	6	6	6	12		2	2				6	5	11				1	1	2
Taylor	2	1	3							2		2	1	1	2					1	1				1		1
Trempealeau	1		1		1					1	2	3								4	4				2		2
Vernon		3	3							1		1								1	1					1	1
Vilas											3	3	1	1	2					1	1						
Walworth	4	1	5							6	4	10							3	2	5					1	1
Washburn										1	1	2	1	1	2	1		1		1	1				1		1
Washington	2		2					2	2		6	6		1	1				3	3	6				3	1	4
Waukesha	2	2	4					2	2	4	6	10	3	4	7				1	7	8				3	1	4
Waupaca	4	1	5		1		1		1		4	4	1		1				3	4	7				2		2
Waushara								1	1	2		2							2	1	3		1	1			
Winnebago	1	4	5				1	2	3	3	8	11		2	2				9	8	17				2	2	4
Wood								1	1		3	3		2	2				1	3	4					2	2
Total	116	105	221		11		62	57	119	178	268	446	44	57	101	3	7	10	235	215	450	7	8	15	70	51	121

TABLE No. 20—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH.

County	Accidental Traumatism by Other Crushing			Injuries by Animals			Wounds of War			Execution of Civilians by Belligerent Armies			Starvation (Deprivation of Food or Water)			Excessive Cold			Excessive Heat			Lightning			Other Accidental Electric Shocks			Homicide by Firearms		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams	1	1	2																1		1		1	1						
Ashland	5	7	12		2	2														1	1		1	1	1		1		1	1
Barron	3	12	15		2	2																1	2	3				1		1
Bayfield	4	1	5																										1	1
Brown	11	15	26		3	3														1	1	1	1	2	1		1			
Buffalo		7	7																											
Burnett																1		1				3		3						
Calumet		2	2	1		1																								
Chippewa	5	5	10	1	1	2														1	1									
Clark	5	8	13	2		2													1	1	2								1	1
Columbia	5	5	10	2		2														2	2					1	1			
Crawford	2	1	3																											
Dane	8	9	17	1	1	2														2	2	1	3	4	2	4	6	1	1	2
Dodge	4	4	8		1	1																				1	1	1		1
Door	2		2		1	1																			3		3			
Douglas	14	19	33		1	1																	1	1					1	1
Dunn	2	5	7	1		1													1		1									
Eau Claire	4	9	13	1	1	2																			1	1	2	2	1	3
Florence	2		2																											
Fond du Lac	6	14	20		1	1											1	1		1	1									
Forest	4	1	5	1		1																								
Grant	2	2	4																				1	1		1	1	1		1
Green	2	3	5																				1	1						
Green Lake	1	3	4																						1		1			
Iowa	1	2	3																											
Iron	2	2	4																	1	1								2	2
Jackson	1	3	4	1		1																								
Jefferson	2	4	6													1		1					1	1	1		1		1	1
Juneau	2	4	6													1		1	1	1	2	2		2						

Kenosha	18	15	33																	1	1				1	1	2		2	2
Kewaunee		2	2		1	1														1	1									
La Crosse	7	15	22		2	2																			1		1			
Lafayette	1	4	5																									1		1
Langlade	2	9	11		1	1																			1		1		2	2
Lincoln	2	2	4		1	1										1		1							1		1			
Manitowoc	2	8	10	2	3	5														3	3									
Marathon	5	9	14																	1	1		2	2		1	1	1	2	3
Marinette	2	6	8																											
Marquette	1		1																											
Milwaukee	137	113	250	4		4		1	1								1	1	1	6	7				4	5	9	10	13	23
Monroe	1	2	3																				1	1				1		1
Oconto	5	2	7	1	2	3														1	1									
Oneida	5	1	6	1	1	2											1	1		1	1									
Outagamie	11	13	24	1		1																1		1	4		4			
Ozaukee	2	6	8																									1	1	2
Pepin		1	1																											
Pierce	1	1	2																			1		1						
Polk	3	1	4		2	2														1	1									
Portage	3	3	6	1	2	3																	1	1	1		1			
Price	7	4	11																	1	1									
Racine	20	13	33																						1	2	3	2	2	4
Richland	1	1	2		1	1																							1	1
Rock	12	12	24	1	1	2														1	1				1	1	2		1	1
Rusk	1	3	4																											
St. Croix	2	2	4																	1	1				1	3	4			
Sauk	5	6	11																	1	1		1	1	1	1	2	1		1
Sawyer		3	3																											
Shawano	3	4	7	1		1																1		1						
Sheboygan	4	6	10	1		1														1	1				2		2			
Taylor	3	1	4		1	1													1		1									
Trempealeau	1	2	3																				1	1						
Vernon	4	1	5																			1		1						
Vilas	2	2	4																			1		1						
Walworth	2	10	12	1		1																				1	1			
Washburn	2	1	3		1	1																						1	1	2
Washington	9	4	13		1	1																								
Waukesha	8	12	20	1		1													1	1	2				1	1	2			
Waupaca	2	1	3														1	1		3	3		1	1						
Waushara	1		1																											
Winnebago	11	7	18		1	1													1	1	2	1		1					1	1
Wood	7	9	16	3	1	4																	1	1	3	1	4		2	2
Total	415	465	880	29	36	65		1	1							4	4	8	8	36	44	14	20	34	33	25	58	24	37	61

TABLE No. 20—SHOWING THE TOTAL DEATHS IN EACH COUNTY FROM JAN. 1, 1920, TO DEC. 31, 1921, ARRANGED ACCORDING TO THE CAUSES OF DEATH.

County	Homicide by Cutting or Piercing Instruments			Homicide by Other Means			Infanticide			Fracture (Cause not Specified)			Other External Violence (Cause Specified)			Other External Violence (Cause not Specified)			Sudden Death			Cause of Death not Specified or Ill-defined			Still-births		
	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.	1920	1921	Tot.
Adams																									9	5	14
Ashland					1	1		1	1	1		1		1	1				1		1	4	1	5	17	19	36
Barron													1	1	2		1	1				3	3	6	19	17	36
Bayfield										1		1	2		2							3	2	5	9	11	20
Brown													2		2							5	3	8	52	59	111
Buffalo																						1	3	4	9	12	21
Burnett																						2	1	3	6	7	13
Calumet																									7	12	19
Chippewa													1		1							2	3	5	19	25	44
Clark													1	1	2							2	3	5	20	22	42
Columbia																							1	1	14	19	33
Crawford													1	1	2							2		2	7	8	15
Dane				2		2							1	1	2		1	1				1	3	4	27	58	85
Dodge										1		1	1		1							4	5	9	34	33	67
Door																							2	2	11	18	29
Douglas					2	2							2	3	5		1	1				2	2	4	42	35	77
Dunn														1	1					1	1	2	1	3	20	12	32
Eau Claire													1		1							3	2	5	26	44	70
Florence																						1	1	2		4	4
Fond du Lac											1	1	1		1		1	1					5	5	16	44	60
Forest														2	2							2	3	5	9	6	15
Grant		1	1										2	1	3		1	1	1		1	4	5	9	21	26	47
Green													1		1										7	18	25
Green Lake																						1	3	4	6	6	12
Iowa																							1	1	1	16	17
Iron				1		1																1		1	3	4	7
Jackson													1		1							3	1	4	8	13	21
Jefferson											1	1					1	1					1	1	23	19	42

Juneau											1	1					1	1				2		2	4	13	17
Kenosha								1	1				3		3		2	2					1	1	53	52	105
Kewaunee																									4	12	16
La Crosse	1		1		1	1				1		1	3	1	4				2		2	2	3	5	29	33	62
Lafayette										1		1										3	1	4	7	14	21
Langlade				1		1								1	1										18	22	40
Lincoln													1	2	3								2	2	13	16	29
Manitowoc													1	1	2				1		1	2	4	6	39	23	62
Marathon										2		2	3	1	4		1	1				3	6	9	46	64	110
Marinette				1		1					1	1										2	2	4	31	33	64
Marquette																						2	1	3	6	3	9
Milwaukee	1		1	3	5	8		4	4		1	1	7	7	14		2	2				3	2	5	377	391	768
Monroe				1		1					1	1										2	2	4	23	13	36
Oconto													1	1	2							2	4	6	15	18	33
Oneida				1	1	2								1	1		1	1				1		1	12	15	27
Outagamie													1		1							3	2	5	46	28	74
Ozaukee																									11	9	20
Pepin													1	2	3							1		1		3	3
Pierce																				1	1	2		2	15	8	23
Polk										3		3	1	1	2								3	3	19	26	45
Portage				2		2							1		1		1	1	1	2	3	3	6	9	22	14	36
Price													1		1							3	2	5	4	12	16
Racine				1	1	2								2	2							1	1	2	70	67	137
Richland																			1		1	3	3	6	17	12	29
Rock	2		2								1	1	2	1	3				1	1	2				47	37	84
Rusk													1		1							2	1	3	18	22	40
St. Croix													1		1				1		1	4	2	6	16	11	27
Sauk													1	1	2							4	1	5	25	18	43
Sawyer													2		2							1		1	3	6	9
Shawano													2		2							6	4	10	26	22	48
Sheboygan														1	1							2	1	3	42	34	76
Taylor													1		1							2	1	3	11	8	19
Trempealeau																									8	13	21
Vernon													1		1							3	2	5	17	15	32
Vilas																						2	1	3	1	4	5
Walworth											1	1	1	1	2							2	1	3	9	6	15
Washburn																							1	1	7	16	23
Washington											1	1	1		1								1	1	9	9	18
Waukesha					1	1					1	1	1	1	2								3	3	25	21	46
Waupaca													1		1					1	1	4	2	6	26	15	41
Waushara																									13	7	20
Winnebago											1	1	2		2							2	3	5	28	37	65
Wood					1	1				1		1										3		3	19	39	58
Total	4	1	5	13	13	26		6	6	11	11	22	59	37	96		14	14	9	6	15	125	124	249	1673	1813	3486

TABLE No. 21—SHOWING DEATHS IN CITIES DURING THE CALENDAR YEAR OF 1920 ARRANGED ACCORDING TO AGE GROUPS AND IMPORTANT CAUSES OF DEATH

Cities	Population U. S. Census for 1920	Total Deaths	Annual death rate per 1000 population	Important Ages			Important Causes of Death														
				Under 1 Year	1-4 Years	65 Years and Over	Pulmonary Tuberculosis	Other Tuberculosis	Typhoid Fever	Diphtheria	Scarlet Fever	Measles	Whooping Cough	Pneumonia	Diarrhea and Enteritis Under 2 Years	Meningitis	Influenza	Puerperal Septicemia	Cancer	Violence	Stillbirths
Cities over 50,000:																					
Milwaukee	457,147	5,381	11.7	970	343	1,326	329	60	9	120	27	48	61	875	224	52	213	27	415	282	369
Racine	58,593	711	12.2	101	54	177	35	2	3	24	13	7	6	93	25	5	76	5	53	36	65
Cities 25,000-50,000:																					
Kenosha	40,472	412	10.2	101	36	64	20	2	1	6	3	2	11	55	27	3	45	1	23	34	48
Superior	39,624	459	.5	76	36	87	32	2	1	12	13	8	11	50	7	6	29	1	27	41	36
Madison	38,378	447	11.6	41	10	135	19	4	.....	4	.....	1	5	42	5	5	32	2	48	25	13
Oshkosh	33,162	437	13.2	49	9	171	25	1	.....	.....	3	3	.....	50	4	3	19	1	45	15	24
Green Bay	31,017	581	18.6	125	34	159	23	12	.....	4	6	3	10	53	19	8	14	2	49	31	44
Sheboygan	30,955	362	11.6	50	24	109	17	9	5	13	14	5	.....	20	15	3	14	.....	30	21	22
La Crosse	30,363	490	16.	50	11	159	33	9	.....	3		4	1	48	3	6	16	.....	56	25	30
Cities 10,000-25,000:																					
Appleton	19,561	270	13.8	28	12	89	24	2			2	4		30			11		18	20	14
Ashland	11,334	204	17.9	25	3	51	14	5						41	2	5	6		18		13
Beloit	21,284	310	14.5	43	17	87	20	6			4	5	2	45	9	2	28		14	22	17
Eau Claire	20,880	405	19.3	48	12	127	46	2		3	5		2	34	6	4	24	2	25	19	21
Fond du Lac	23,427	348	14.9	55	10	107	9	4		7			5	40	12	2	15	1	27	15	11
Janesville	18,293	259	14.1	28	12	96	20	6			2			32	2	3	15		20	22	23
Manitowoc	17,563	246	14.1	42	7	74	12			1	9		3	10	3	3	18		10	18	14
Marinette	13,610	187	13.7	23	13	60	9	3		2			4	17	7	1	25		12	11	11
Stevens Point	11,370	142	12.4	24	4	47	6	2	2	2			2	9			11	2	13	7	9
Waukesha	12,558	158	12.5	16	10	44	3	3			8		.....	20	.....	.....	17	.....	11	8	6
Wausau	18,661	277	14.8	52	16	72	11	5			3	6	4	35	2	8	24	.....	26	12	20
West Allis	13,765	120	8.7	29	16	25	6	2		8	.....	5	1	13	4	2	9	.....	6	5	12
Cities 5,000-10,000:																					
Baraboo	5,538	75	13.5	12	1	36	3	1			.....	.....	.....	7	4	.....	1	.....	10	5	5
Beaver Dam	7,992	91	11.4	8	6	34	7	2		2	.....	.....	2	7	3	.....	4	.....	10	2	10
Chippewa Falls	9,130	191	20.9	8	7	58	3	1		6	.....	.....	2	11	.....	5	28	1	21	9	.....
Cudahy	6,725	70	10.3	24	4	8	3	1		2	.....	2	4	11	3	.....	2	.....	3	12	11
De Pere	5,165	62	12.0	9	2	32	6	1			.....	.....	1	5	.....	2	1	.....	4	1	5

Kaukauna	5,951	64	10.7	8	2	25	4			2	1			4	1		6		4	5	4
Marshfield	7,394	162	21.9	16	3	37	3	1		2	1			20	1	3	4	1	21	10	6
Menasha	7,214	80	11.1	11	4	35	9	1			1	9		4		1	1		6	6	3
Menomonie	5,104	65	12.7	6	1	33	4							7			5		6	1	10
Merrill	8,068	85	10.5	19	1	31	8					2		13	2		3		9	3	8
Neenah	7,171	100	13.9	14	4	37	6	1	8	1				10	2	2	5		8	4	2
Portage	5,582	66	11.8	3	1	33	1				2			6			6		9	2	2
Rhinelander	6,654	84	12.6	14	5	16	3	3	1		1		3	5		1	8		4	8	5
South Milwaukee	7,598	92	12.1	18	7	19	3	1	1	6	1	1	2	15	2		3		9	4	3
Stoughton	5,101	73	14.3	11	1	33	6	2						6			2		3	8	2
Two Rivers	7,305	76	10.4	21	4	26	2				2		2	10	2	1	3		3	2	7
Watertown	9,299	143	15.4	13	5	59	3	1		1			2	19	5		7	1	14	5	8
Wauwatosa	5,818	65	11.1	6	2	36	5			1				4			6		4	2	1
Wisconsin Rapids	7,243	86	11.9	12	3	30	2	1						21	2		10		2	3	5
Antigo	8,451	104	12.3	12	7	28	3	1		2	6		2	4	2	1	7	1	5	7	4
Cities 3,000-5,000:																					
Berlin	4,400	64	14.5	7	4	38	1					1	1	8			2		6	1	4
Burlington	3,626	62	17.1	4		28	4				2			5	1		1		3	3	2
Clintonville	3,275	16	4.9	3	1	5	1							2			1		1		4
Delavan	3,016	37	12.3	7	1	21	2							2	1	1	1		7	3	1
Fort Atkinson	4,915	51	10.4	4		27	6	1						4	2				4	3	4
Hartford	4,515	37	8.2	8	1	11	4						1	7	3	1	1		3		1
Hudson	3,014	48	15.9	6	2	16	2			2				7		1	1		6	2	3
Hurley	3,188	39	12.2	5	5	3	2				1	1	2	4	2	1	3		1	3	3
Ladysmith	3,581	61	17.0	5	3	12	3		1		1		1	5		5	9		1	5	10
Mayville	3,011	31	10.3	8		15	2	2					2	1				1	4	1	
Monroe	4,788	97	20.3	7	3	42	3					1	1	11	1		5		10	7	8
New London	4,667	62	13.3	9	3	17	4				5			10					4	1	3
North Milwaukee	3,047	38	12.4	11	5	5	3	1	1			1	4	3	3		3		1	2	2
Oconomowoc	3,301	36	10.9	8		13	4			1				3	1		2	1	2	1	2
Oconto	4,920	88	17.8	3	1	43	10	1			1			6	2		6		8	5	2
Platteville	4,353	83	19.1	6	3	41	5							2	1		1		6	6	2
Plymouth	3,415	35	10.2	5	1	19								4	1				3	1	3
Port Washington	3,340	50	14.9	5	1	22	2				1			3	1		3		6	4	4
Prairie du Chien	3,537	53	15.0	5	1	14	2	4			2			4	1		2		5	5	2
Rice Lake	4,457	66	14.8	10	1	15	3				1			8	1	1	1	1	6	6	3
Richland Center	3,409	49	14.3	6	2	25	1						2	4	2	1	1		2	1	1
Ripon	3,929	51	13.0	3		28	5	1			1			2					6	1	
Shawano	3,544	33	9.3	7	1	14							3	4		1			5		6
Sparta	4,466	86	19.2	13	3	35	1	1			1			5	1	4	8	1	6	2	3
Sturgeon Bay	4,553	60	13.2	10		27					2			3	1		2		7	5	3
Tomah	3,257	43	13.2	9		20	1				2			2					2	1	2
Washburn	3,707	32	8.6	10		4	2	1					1	4	1		1			3	1
Waupun	4,440	46	10.3	7	1	18	5						2	2			2		2	2	
West Bend	3,378	55	16.3	4	1	23	1		2			2		4					4	4	2
Whitewater	3,215	54	16.8	3	1	29	3	1						3			1		4	3	1

TABLE No. 21—SHOWING DEATHS IN CITIES DURING THE CALENDAR YEAR OF 1920 ARRANGED ACCORDING TO AGE GROUPS AND IMPORTANT CAUSES OF DEATH

Cities	Population U. S. Census for 1920	Total Deaths	Annual Death Rate per 1,000 Population	Important Ages			Important Causes of Death														
				Under 1 Year	1-4 Years	65 Years and Over	Pulmonary Tuberculosis	Other Tuberculosis	Typhoid Fever	Diphtheria	Scarlet Fever	Measles	Whooping Cough	Pneumonia	Diarrhea and Enteritis Under 2 Years	Meningitis	Influenza	Puerperal Septicemia	Cancer	Violence	Stillbirths
Cities under 3,000:																					
Algoma	1,911	25	13.1	2	2	12						1		3	1				1	1	1
Alma	970	12	12.4		1	7	1							1					3		2
Altoona	960	3	3.1																1	1	2
Amery	1,203	17	14.2	2		6									1		2		3		4
Augusta	1,407	19	13.5	3		10	1						1	1			2		2	1	
Barron	1,623	38	23.5	7	2	10	1	1		1				3			4		3		1
Bayfield	1,441	19	13.2	6	1	5	2			1			1	1			1				2
Black River Falls	1,798	34	18.9	5		15	2				1			4	1		1	1	3	2	1
Boscobel	1,670	29	17.4		2	14								1			1		6	4	
Brodhead	1,600	24	15.0			17	2	1						3			1		1	1	
Buffalo	286	3	10.5			2															
Cedarburg	1,738	23	13.2	2	4	10					1		3	4							1
Chetek	1,154	10	8.7	1		4							1				1		1	1	1
Chilton	1,833	23	12.5	2	3	5	3	1				1	1	1			3		1	4	
Colby	798	5	6.2			2	1							1							
Columbus	2,460	37	15.0	1		21	1	1						3		1		1	3		2
Crandon	1,632	13	8.0	4		5	1						1						2		
Cumberland	1,528	28	18.2	4	1	8		1						1		1	1	1	1	2	1
Darlington	1,798	33	18.2	2	1	15	1			1				2		1	4		4	2	1
Dodgeville	1,896	54	18.5	7	1	23			1					4			3	1	4	3	
Durand	1,517	16	10.6			8	1							3			3				
Edgerton	2,688	51	19.0	2	2	21	2	1		1				11			8		6	3	5
Elkhorn	1,991	35	17.5		2	20								1			8		3	1	
Elroy	1,713	14	8.2		1	7								3					1	1	
Evansville	2,209	34	15.4	1		19	2							4			4		4	1	1
Fennimore	1,383	18	13.0	4		7							1			1	1		2	2	
Fountain City	880	16	18.2	1		13													2	1	

Glenwood	779	8	10.3	1	1	2				1					1				1	1	
Greenwood	761	8	10.5		1	3	1								1		2				
Hayward	1,302	7	5.4	1		3					1										
Horicon	2,134	35	16.4	4	3	11	2						1	2	1		4	1	3		4
Jefferson	2,572	24	9.3	3		10	4	1						1	1		1		3	3	2
Juneau	1,180	7	6.0		1	4													1		
Kewaunee	1,868	23	12.3	1	2	13	2				3			1			1		3		
Lake Geneva	2,632	38	14.4	9	1	24						1		8					9	3	1
Lake Mills	1,704	14	8.0		1	7								2			8			2	2
Lancaster	2,488	34	13.8	4	1	18	1						1	1			2		4		2
[illegible]	1,980	29	14.2	4	1	14	2	2						6			2		3		
Medford	1,851	22	11.7	1	3	9					1					2	8		2		3
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	400	108	833	67	1,363	873	1,070

TABLE No. 22—SHOWING DEATHS IN CITIES DURING THE CALENDAR YEAR OF 1921 ARRANGED ACCORDING TO AGE GROUPS AND IMPORTANT CAUSES OF DEA

Cities	Estimated Population for 1921	Total Deaths	Annual Death Rate per 1,000 Estimated Population	Important Ages			Important Causes of Death														
				Under 1 Year	1-4 Years	65 Years and Over	Pulmonary Tuberculosis	Other Tuberculosis	Typhoid Fever	Diphtheria	Scarlet Fever	Measles	Whooping Cough	Pneumonia	Diarrhea and Enteritis Under 2 Years	Meningitis	Influenza	Puerperal Septicemia	Cancer	Violence	Stillbirths
Cities over 50,000:																					
Milwaukee	465,476	4,562	9.7	864	261	1,230	257	57	9	90	58	5	15	409	175	39	14	14	408	332	347
Racine	60,652	592	9.7	103	41	170	30	4	6	28	11	1	5	51	19	5	2	3	61	37	43
Cities 25,000-50,000:																					
Kenosha	42,382	326	7.7	69	28	72	15	2	.....	12	1	.....	.....	27	16	1	2	1	19	36	47
Superior	39,624	440	11.1	73	19	88	27	6	2	9	10	.....	5	30	6	5	1	.....	33	46	30
Madison	39,662	424	10.2	42	18	123	14	4	1	10	.....	.....	.....	31	4	8	2	1	43	30	34
Oshkosh	33,172	442	13.3	71	8	187	23	2	1	3	.....	.....	.....	21	13	4	2	.....	56	25	23
Green Bay	31,590	528	16.7	90	13	134	24	16	4	15	1	.....	.....	44	10	6	4	6	41	27	50
Sheboygan	31,410	342	10.8	62	6	116	16	4	9	9	1	1	7	17	10	.....	1	1	28	22	19
La Crosse	30,363	522	17.2	67	18	175	28	8	.....	1	.....	.....	1	50	7	4	.....	1	62	31	29
Cities 10,000-25,000:																					
Appleton	19,839	257	12.9	42	17	76	8	2	.....	2	2	.....	.....	23	11	2	.....	.....	21	15	13
Ashland	11,334	195	18.0	28	5	34	14	3	3	.....	1	.....	1	10	5	3	1	1	16	10	14
Beloit	21,899	205	9.2	37	13	56	12	3	.....	2	2	.....	3	11	6	.....	2	1	18	8	15
Eau Claire	21,137	322	15.2	43	6	113	37	2	1	1	2	.....	1	16	5	4	.....	2	38	16	37
Fond du Lac	23,890	301	12.6	44	8	114	10	4	.....	10	1	.....	.....	10	9	1	.....	.....	35	15	25
Janesville	18,732	198	10.6	26	4	71	12	3	.....	1	.....	.....	1	15	2	3	1	.....	22	18	8
Manitowoc	18,016	219	12.2	43	6	63	14	2	2	1	.....	.....	2	7	9	3	.....	2	21	14	13
Marinette	13,610	154	11.3	21	14	52	9	7	1	1	2	2	.....	15	8	.....	.....	.....	17	8	19
Stevens Point	11,637	139	11.9	23	9	60	4	.....	1	3	1	2	.....	11	4	.....	1	.....	9	4	4
Waukesha	12,939	136	10.5	17	2	52	5	3	.....	3	.....	.....	2	13	2	.....	5	.....	16	10	7
Wausau	18,871	263	13.9	46	12	76	5	3	2	1	3	.....	.....	17	4	2	1	2	19	16	29
West Allis	14,477	126	8.7	27	11	25	10	4	.....	14	.....	.....	.....	9	4	1	1	.....	6	6	9
Cities 5,000-10,000:																					
Baraboo	5,538	63	11.3	3	.....	42	1	.....	.....	.....	1	.....	.....	1	1	.....	.....	.....	13	9	4
Beaver Dam	8,115	110	13.5	12	5	51	6	.....	.....	.....	.....	.....	1	6	.....	.....	.....	1	13	7	6
Chippewa Falls	9,367	180	19.2	12	4	61	8	2	.....	1	.....	.....	.....	10	2	1	6	1	17	4	7
Cudahy	7,028	47	6.7	23	5	6	.....	.....	.....	2	.....	.....	1	7	6	.....	.....	1	3	1	9

De Pere	5,233	51	9.7	12	3	17	1	2	.....	5	.....	.....	.....	3	2	.....	.....	.....	6	1	3
Kaukauna	6,074	37	6.1	9	.....	9	2	.....	.....	.....	.....	1	.....	1	3	.....	.....	1	2	1	.....
Marshfield	7,555	150	19.9	13	10	36	5	3	.....	1	2	.....	1	8	1	1	1	.....	19	13	10
Menasha	7,327	79	10.7	9	2	28	5	3	.....	2	.....	.....	.....	5	.....	1	1	.....	4	10	6
Menomonie	5,110	71	13.9	11	.....	33	4	1	.....	.....	.....	.....	.....	7	.....	.....	.....	.....	13	3	4
Merrill	8,068	85	10.5	14	1	27	1	.....	.....	.....	.....	.....	1	12	4	.....	.....	1	10	1	6
Neenah	7,334	76	10.3	16	2	23	7	2	.....	.....	1	.....	.....	7	2	.....	.....	.....	4	6	4
Portage	5,596	85	15.2	9	3	28	2	.....	.....	.....	1	.....	.....	11	.....	2	.....	.....	12	4	2
Rhinelander	6,755	98	14.5	17	3	29	2	.....	.....	1	1	1	.....	8	3	1	.....	1	11	7	11
South Milwaukee	7,748	54	7.0	17	4	9	7	.....	.....	1	.....	.....	.....	4	3	.....	.....	1	5	3	2
Stoughton	5,135	63	12.3	7	2	33	8	.....	.....	.....	.....	.....	.....	4	.....	1	.....	.....	10	3	3
Two Rivers	7,550	62	8.2	21	5	17	2	.....	.....	.....	.....	.....	1	5	3	1	.....	.....	6	4	2
Watertown	9,346	143	15.3	15	3	64	6	2	.....	.....	1	.....	.....	8	3	1	.....	.....	19	7	7
Wauwatosa	6,065	43	7.1	9	1	18	3	2	.....	1	.....	.....	.....	.....	2	.....	.....	.....	3	2	.....
Wisconsin Rapids	7,315	85	11.5	28	1	22	2	.....	.....	.....	1	.....	.....	6	5	.....	1	.....	7	8	9
Antigo	8,576	123	14.3	21	2	36	5	1	.....	.....	.....	.....	.....	7	3	1	1	1	10	10	13
Cities 3,000-5,000:																					
Berlin	4,400	71	16.1	5	.....	34	10	.....	1	.....	.....	.....	.....	2	1	1	.....	1	2	4	4
Burlington	3,667	38	10.3	4	1	18	.....	.....	.....	.....	.....	.....	.....	2	1	1	.....	.....	2	4	5
Clintonville	3,427	25	7.3	5	2	9	1	.....	.....	.....	.....	.....	.....	1	1	1	.....	.....	2	1	1
Delavan	3,072	36	11.7	3	.....	22	.....	1	.....	.....	.....	.....	.....	2	1	.....	1	.....	3	.....	.....
Fort Atkinson	5,018	48	9.6	6	.....	27	2	1	.....	.....	.....	.....	.....	6	1	.....	.....	1	3	3	5
Hartford	4,668	48	10.2	6	2	18	6	1	1	.....	.....	.....	.....	5	.....	1	.....	.....	10	2	1
Hudson	3,034	34	11.2	.....	.....	15	3	.....	.....	.....	.....	.....	.....	4	.....	1	.....	.....	4	3	.....
Hurley	3,188	31	9.7	4	6	5	3	.....	.....	.....	.....	.....	.....	1	3	.....	1	.....	2	7	2
Ladysmith	3,703	49	13.2	11	1	9	2	.....	1	.....	.....	.....	.....	4	1	.....	.....	.....	4	3	14
Mayville	3,083	20	6.5	5	1	10	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	2
Monroe	4,825	68	14.1	6	.....	43	4	.....	1	.....	.....	.....	.....	9	.....	1	1	1	10	3	7
New London	4,795	44	9.2	12	3	20	6	.....	.....	.....	.....	.....	1	10	2	.....	.....	.....	3	1	2
North Milwaukee	3,165	27	8.5	4	4	3	2	.....	.....	1	.....	.....	1	3	1	.....	.....	.....	3	.....	2
Oconomowoc	3,325	47	14.1	3	.....	27	3	.....	.....	.....	.....	.....	.....	2	.....	1	.....	.....	6	5	3
Oconto	4,920	68	13.8	10	2	26	4	1	.....	.....	.....	.....	.....	6	1	2	.....	.....	11	5	3
Platteville	4,353	73	16.8	7	2	37	5	.....	.....	.....	.....	.....	.....	4	1	1	1	.....	6	4	1
Plymouth	3,447	47	13.6	4	2	23	2	1	.....	.....	.....	1	.....	1	.....	.....	.....	.....	5	3	2
Port Washington	3,340	43	12.8	5	1	17	3	.....	.....	.....	.....	.....	.....	4	.....	1	.....	.....	6	4	4
Prairie du Chien	3,575	47	13.1	8	.....	18	2	.....	.....	1	.....	.....	.....	.....	5	.....	.....	.....	6	2	.....
Rice Lake	4,505	71	15.7	6	2	31	3	1	.....	.....	.....	1	.....	4	1	.....	.....	.....	9	8	3
Richland Center	3,484	54	15.4	5	5	23	5	.....	.....	1	.....	.....	.....	3	.....	.....	.....	.....	5	3	3
Ripon	3,948	49	12.4	2	3	30	1	.....	.....	1	.....	.....	.....	4	.....	2	.....	.....	4	3	2
Shawano	3,606	28	7.8	10	3	11	.....	.....	.....	.....	1	.....	.....	5	1	.....	.....	.....	2	2	4
Sparta	4,515	90	19.8	18	4	32	2	5	.....	.....	.....	.....	5	8	1	2	4	.....	2	5	2
Sturgeon Bay	4,582	74	15.3	6	3	28	1	2	3	.....	1	.....	.....	2	1	1	.....	.....	3	3	2
Tomah	3,257	45	13.8	5	.....	26	1	.....	.....	.....	.....	1	.....	1	.....	1	1	.....	7	.....	.....
Washburn	3,707	31	8.3	9	.....	10	4	.....	.....	1	.....	.....	.....	3	4	.....	.....	.....	2	1	3
Waupun	4,547	46	10.0	4	.....	25	7	.....	.....	.....	1	.....	.....	1	.....	1	.....	.....	6	.....	4
West Bend	3,469	46	13.3	7	.....	21	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	4	5	1
Whitewater	3,215	47	14.6	3	1	24	3	.....	.....	2	.....	.....	.....	8	.....	.....	.....	.....	2	5	2

TABLE No. 22—SHOWING DEATHS IN CITIES DURING THE CALENDAR YEAR OF 1921 ARRANGED ACCORDING TO AGE GROUPS AND IMPORTANT CAUSES OF DEATH

Cities	Estimated Population for 1921	Total Deaths	Annual Death Rate per 1,000 Estimated Population	Important Ages			Important Causes of Death														
				Under 1 Year	1-4 Years	65 Years and Over	Pulmonary Tuberculosis	Other Tuberculosis	Typhoid Fever	Diphtheria	Scarlet Fever	Measles	Whooping Cough	Pneumonia	Diarrhea and Enteritis Under 2 Years	Meningitis	Influenza	Puerperal Septicemia	Cancer	Violence	Stillbirths
Cities under 3,000:																					
Algoma	1,911	24	12.5			14	2				1								4	3	2
Alma	970	10	10.3			5														1	1
Altoona	973	4	4.1			1															1
Amery	1,257	13	10.3	1		5	1							2				1	3	1	2
Angusta	1,407	23	16.3	3	1	14									2				3	2	1
Barron	1,650	26	15.8	3		13								2					2	4	3
Bayfield	1,441	21	14.6			11	3													1	1
Black River Falls	1,798	37	20.5	5		19	4	1			2			1	1			1	4	1	
Boscobel	1,684	39	23.2	3		18	2				1			3					4	1	
Brodhead	1,608	31	19.2	2		23	3		1		1			3					4		
Buffalo	289	2	6.9			1								1							
Cedarburg	1,738	15	8.6	1	2	7	1						1						3	1	1
Chetek	1,186	12	10.1	1	1	6				4				2					1		1
Chilton	1,863	12	6.5	3		4	2							1					2		1
Colby	798	6	7.5			4					1								1		2
Columbus	2,460	53	21.5	1	2	28	2	1						1					3	3	
Crandon	1,632	18	11.0	7	1	5	1							3	2				2	1	
Cumberland	1,534	28	18.2	5		4	1							1	2	2	2		2	2	
Darlington	1,798	25	12.6	4	1	13								1	1	1			4	2	3
Dodgeville	1,906	43	22.5	7	1	23								4				2	3	2	1
Durand	1,517	20	13.1	5	1	6	3				1			2	1				1	1	1
Edgerton	2,705	41	15.1	9		16	1			1				6	2		1		4	3	1
Elkhorn	2,019	25	12.4	2	2	15	1							2		1			2	1	1
Elroy	1,713	24	14.0	2	2	13	1						2	2					1	2	
Evansville	2,223	22	9.9	2	1	13	1						1	1					2	1	
Fennimore	1,405	21	14.9	1	1	10	1		1				1	1		1			5	2	1

Fountain City	880	11	12.5	1		7							1								1
Glenwood	779	9	11.5	1	1	2	3							1							1
Greenwood	770	4	5.2	1		3													1		
Hayward	1,302	12	9.2	1	2	6	2								1				1		
Horicon	2,159	22	10.2	5		11	1						1						1	1	1
Jefferson	2,572	38	14.8	3		21	5	2		1					1	1		1	3		
Juneau	1,174	12	10.7			6	1												1	1	
Kewaunee	1,867	21	11.2		1	11	2							2					3		1
Lake Geneva	2,632	18	6.8			11	1									1			1		
Lake Mills	1,769	18	10.1	1		9											1		2		1
Lancaster	2,500	45	18.0	2	7	19								4					7	3	
Mauston	1,992	40	20.1	5	1	15		1		1				3	1		1		7	4	3
Medford	1,884	20	10.6	2		8	2							3					1		1
Mellen	1,995	9	4.5	3		1									1				1	3	
Mineral Point	2,569	43	16.7	3	1	26								2					6	4	1
Mondovi	1,576	14	8.9		1	8								2				1	3	3	1
Neillsville	2,180	21	9.5	1		14	1		1					1				1		2	1
New Lisbon	994	9	9.0			5	1							1							
New Richmond	2,274	22	9.7	3		8	2							1	1					5	
Oconto Falls	1,962	18	9.2	4	1	7	1			2					1				2		3
Onalaska	1,066	24	22.3			5	14							1					1	1	1
Park Falls	2,746	27	9.8	7	2	6				1					2	2			1	8	3
Peshtigo	1,440	154	10.7	20	14	52	9	7	1	1	2	2		15	8				17	8	20
Phillips	1,975	11	5.5	6		3										1			2	1	
Pittsville	509	3	5.9			2													2		
Prescott	892	17	19.1	1		9								1	1		1		3	2	
Princeton	1,275	20	15.7			18	1												1		
Reedsburg	3,035	56	18.5	5		30	1			1				4	1				6	3	1
River Falls	2,320	23	9.9	1		15	2											1	4	1	3
Seymour	1,297	24	18.5	3		9	1								1				4		
Sheboygan Falls	2,039	22	10.7	1		9	2				1			2					2	1	1
Shullsburg	1,167	25	21.4		3	14	2						1	2				1	3		1
Spooner	2,377	14	5.9	2		4	1							1					2	1	4
Stanley	2,577	22	8.5	5	1	6	3				2		2	2	2				2	1	2
Tomahawk	2,801	42	15.0	21	5	17	2						1	5	3	1			6	4	2
Viroqua	2,625	34	12.9	4		19	2	2				1		3					2		1
Waupaca	2,844	48	16.9	7	2	20	1	1						2	1		1		3	3	1

MORTALITY AMONG YOUNG CHILDREN

Our mortality among young children is so serious a problem and represents such an economic waste that ways and means to solve the problem have engaged the careful attention of the United States Congress and the legislature of practically every state in the Union. The fact that each year nearly a quarter of a million babies under one year of age die in the continental United States is sufficient to arouse the interest and challenge the attention of all thoughtful citizens. No natural increase in the wealth of the state can approach in importance and value the sixty-two thousand or more infants born each year in Wisconsin. Of these children born in the state each year at the present rate approximately 4,500 of them die before they reach one year of age and more than 1,400 of them die before they are one month old.

During the past eight years for which accurate tables have been prepared, namely the years from 1914 to 1921, inclusive, there has been a considerable reduction in the general death rates with a corresponding increase in the average duration of human life. This has been brought about largely through the saving of life at the younger age periods and especially in infants under one year of age. Only eight years ago the infant mortality in Wisconsin was 94.6 deaths under one year of age for every thousand live births. This has gradually decreased so that during the calendar year of 1921 the infant death rate was 71.9 per thousand births. Some of the means by which this desirable result has been accomplished the reader will find fully discussed in the report of the Bureau of Child Welfare and Public Health Nursing. This report outlines in detail the problems of maternal and child welfare in Wisconsin and what is being done to help solve them.

We have each year in Wisconsin approximately 4,500 deaths of children under one year of age where the cause of death is given as congenital weakness, injuries at birth, infantile diarrhea and other causes peculiar to the early months of life. Many of these, of course, are among babies who inherit from their parents frail bodies which cannot survive without the greatest care. In our cities especially acquired and uncured diseases of the parents, particularly venereal disease, leave their fatal mark upon the child. Poverty and insufficient amount of nourishing food for the prospective mother, improper housing and overwork of the mother may seal the fate of the newborn infant. The first year of life is perhaps the most hazardous year of our entire existence. The mortality statistics show that a baby when it comes into the world has less chance to live one week than an old man of ninety, and less chance to live a year than one of eighty.

The relation of parent nativity to infant mortality is important in a comprehensive understanding of the entire problem. From a study

of deaths by age groups according to nativity of deceased and nativity of parents it is shown that the death rate from prenatal causes is exceptionally high among the children of native mothers and that this is an important factor to be considered in any campaign for the improvement of child welfare in a community composed largely of native-born citizens. On the other hand in a community composed largely of foreigners, particularly people representing the Italian and Slavic races, the principal causes to be combatted are those arising from poverty, ignorance, overcrowding and poor sanitation. The fewer deaths from prematurity and congenital defects among children of foreign parents may possibly be accounted for in part at least by the greater vitality and superior constitution of the mothers. The child born physically fit is dependent for its life and future welfare upon the intelligence and care of the mother.

If the mother is able and willing to nurse her child the chance of its healthy survival is excellent. If she fails to perform her part or is unabe to nurse her child the next hope for the child is that the mother may know the best substitutes for breast milk and how to use them.

The third peril, greatest during the first two years of life but great for five years or longer, is that the mother may think that all children must pass through attacks of the various communicable diseases. This is an extremely fatal doctrine for young children. The deeply cherished notion among old-fashioned mothers that every child must have measles, mumps and whooping cough some time and that when any of these diseases prevail in the community, and the family is not particularly rushed with other affairs, it is thought to be a good time for the children to have these diseases and be done with them. Many fond parents have invited measles into their homes and taken a week or two, sometimes a month or longer, to nurse the innocent patients through the illness. These parents do not realize or do not know that measles ranks with smallpox in communicability, with scarlet fever in mortality and has serious after-effects of pneumonia, tuberculosis, and defective ears and eyes. It is the serious after-effects that makes measles such a serious disease. It leaves weaklings in its wake and the community that resignedly gives itself over to an epidemic lives to regret the day. Somebody is left to suffer lifelong defects.

The question of whether it is wise economy to so safeguard the life of the child both before and after birth so as to insure its future development has been seriously considered. It is charged by some that our efforts to reduce infant mortality interferes with the law of survival of the fittest. Eminent authorities who have made a careful study of this problem based on actual experience state that "a high infant death rate in any community implies in general a high death rate in the next four years of life, while low death rates at both age periods are similarly associated." Sir Arthur Newsholme, the eminent English authority has the following comment to make on this subject:

"In view of the commonly entertained error that infant mortality may on the balance be selective in character, securing survival of the more robust, it is noteworthy that the parts of England which have

the highest infant mortality continue at higher ages to experience a higher death-rate than more favored districts. Any possible elimination of the weakest by natural selection which may have occurred, is accompanied to a preponderant extent by the manufacture of weaklings and by an excessive deathrate at older ages, due to continuance throughout the whole of lie of the evil conditions which caused the excessive infant mortality.

"From the economic standpoint attack on infant mortality offers abundant scope for action. Here is a period representing about one-eightieth part of the whole life; but in this period one out of 9 or 10 total deaths occurs; furthermore, the state of health in infancy in large measure determines the health standard of the whole of life."

"It was formerly believed that the rate of mortality among children who had not reached the first anniversary of their birth was a wise dispensation of nature intended to prevent children with a weak constitution from becoming too plentiful. Today we know that a great infant mortality is a national disaster on the one hand because numerous economic values are created without purpose and prematurely destroyed. And on the other because the causes of the high rate of infant mortality affect the powers of resistance of the other infants and weaken the strength of the nation in its next generation."

The United States Public Health Service has expressed a similar view as follows:

"A necessary sequence to a high infant mortality rate is the larger number of children who, having weathered the storms of the first year, reach the haven of comparative safety of the other years of life in a battered, weakened and crippled condition such as forever handicaps them in becoming efficient social units. It is therefore in the nature of an axiom that, in the degree to which the infant mortality rate is lowered, to a far greater degree will we diminish the great army of defective and degenerate children among us."

The following table expresses in statistical form the infant mortality problem in Wisconsin covering the period from 1914 to 1921, inclusive:

MORTALITY AMONG YOUNG CHILDREN

	1916	1917	1918	1919	1920	1921
Deaths under 1 year	5,312	4,698	4,980	4,446	4,566	4,473
Deaths under 1 month	1,703	1,615	1,566	1,437	1,231	1,406
Deaths under 1 day	1,082	938	983	930	1,335	1,334
Deaths 1 to 4 years	1,410	1,288	2,170	1,414	1,620	1,289
Total deaths under five years	6,722	5,986	7,150	5,860	6,186	5,762
Total deaths	29,769	29,121	35,214	28,200	29,859	27,674
Proportion deaths under 5 years to total deaths	22.5	20.5	20.3	20.8	20.7	20.8
Total births	59,459	59,013	60,649	55,099	59,269	62,163
Death rate under 1 year per 1,000 live births	89.3	77.7	82.0	80.9	76.5	71.9
Total urban births in cities having 10,000 population or more	22,295	22,752	22,515	20,862	22,775	23,770
Total urban deaths under 1 year	2,181	1,979	2,235	1,928	1,976	1,838
Urban death rate under 1 year per 1,000 live births	97.8	86.9	99.2	92.5	86.7	77.3
Total rural births	37,154	36,261	38,134	34,137	36,494	38,393
Total rural deaths under 1 year	3,131	2,719	2,746	2,518	2,589	2,635
Rural death rate under 1 year per 1,000 live births	84.2	74.9	72.0	73.7	70.9	68.6

From a study of the deaths occurring in Wisconsin each year under one month of age, under one day and under one year it is perfectly evident that the infant welfare work of the immediate future lies in the control of the deaths which occur during the first month of life. There is nothing inevitable about this mortality. Much of it is no more necessary than that which occurs from diarrhea and enteritis and which has been shown to be amenable to health work, particularly educational work among the mothers. The campaign must now take new form. It must be directed at the cause of the deaths during the first month of life. It must emphasize the preparation of women for maternity and the care of the mother during pregnancy. It must concentrate on the improvement of obstetrical service.

TABLE No. 23—SHOWING INFANT MORTALITY IN RURAL COUNTIES FOR 1920

County	Total Live Births	Birth Rate Per 1,000 Population	Total Deaths Under 1 Year (Including Under 1 Month and Under 1 Day)	Total Deaths Over 1 Day and Under 1 Month	Total Deaths Under 1 Day	Death Rate 1st Year Per 1,000 Live Births
Adams	204	22.0	9	2	3	44.6
Barron	834	24.3	65	15	24	78.0
Bayfield	315	18.3	35	9	7	110.1
Buffalo	351	22.5	18	4	6	51.2
Burnett	242	20.6	13	6	4	53.7
Calumet	363	21.1	21	5	11	58.0
Chippewa	715	19.6	46	8	18	64.5
Clark	874	24.8	41	11	10	46.9
Columbia	568	18.6	26	9	11	45.8
Crawford	378	22.5	28	10	14	74.2
Dodge	982	19.7	58	14	12	59.9
Door	450	23.6	38	13	13	84.5
Dunn	611	22.6	45	15	15	73.6
Florence	54	15.0	5	1	1	92.5
Forest	244	24.8	18	3	8	73.8
Grant	849	21.7	51	13	22	60.0
Green	450	20.8	25	6	12	55.6
Green Lake	252	16.9	15	3	6	59.9
Iowa	401	18.7	22	10	4	54.8
Iron	206	20.0	19	4	8	92.0
Jackson	370	20.9	21	9	5	57.8
Jefferson	625	17.8	36	10	9	57.6
Juneau	395	20.5	23	7	6	58.2
Kewaunee	343	21.3	22	7	7	64.2
Lafayette	404	20.2	28	6	10	69.4
Langlade	601	28.0	41	17	10	68.3
Lincoln	462	22.0	35	9	12	76.0
Marquette	190	18.3	8	3	4	42.0
Monroe	706	24.6	58	17	14	82.2
Oconto	641	23.7	33	10	7	52.5
Oneida	352	23.8	20	6	9	57.0
Ozaukee	336	20.6	22	6	8	65.6
Pepin	153	20.4	6	1	2	39.2
Pierce	449	20.7	19	2	6	42.4
Polk	675	25.1	47	15	13	69.9
Price	421	22.8	23	6	4	54.7
Richland	540	27.2	30	6	9	55.5
Rusk	416	25.4	20	5	5	48.2
St. Croix	599	22.9	42	12	15	71.4
Sauk	674	20.7	48	16	15	71.3
Sawyer	206	25.0	19	9	7	92.0
Shawano	907	26.8	78	28	13	86.0
Taylor	491	27.3	27	7	11	56.2
Trempealeau	552	22.5	31	8	10	56.2
Vernon	656	22.4	50	21	12	76.2
Vilas	135	23.9	19	4	1	140.0
Walworth	444	15.2	30	10	13	67.6
Washburn	266	23.4	20	8	3	75.2
Washington	554	21.6	47	9	15	85.0
Waupaca	763	22.3	44	12	15	57.8
Waushara	336	20.2	27	11	10	80.3
Wood	911	26.3	61	20	18	67.0
Total	24,916	.....	1,633	478	507	65.5

TABLE No. 24—SHOWING INFANT MORTALITY RATES FOR 1920 IN THE RURAL PORTIONS OF COUNTIES CONTAINING CITIES OF 10,000 POPULATION OR MORE

County	Total Live Births	Birth Rate Per 1,000 Population	Total Deaths Under 1 Year (Including Under 1 Month and Under 1 Day)	Total Deaths Over 1 Day and Under 1 Month	Total Deaths Under 1 Day	Death Rate 1st Year Per 1,000 Live Births
Ashland	294	22.3	28	9	.....	95.2
Brown	668	21.6	51	7	15	76.4
Dane	1,033	20.2	61	15	26	59.0
Douglas	200	19.8	15	3	.....	75.0
Eau Claire	242	16.4	22	3	10	91.0
Fond du Lac	708	21.7	51	10	21	72.0
Kenosha	215	19.9	21	2	16	97.5
La Crosse	285	20.5	25	5	15	87.5
Manitowoc	818	24.0	75	16	27	92.0
Marathon	1,282	27.6	89	20	31	69.2
Marinette	479	22.8	33	8	13	69.0
Milwaukee	1,265	18.7	174	61	.....	137.5
Outagamie	881	24.8	62	14	16	70.4
Portage	557	24.9	50	11	18	90.0
Racine	397	19.4	37	8	10	93.5
Rock	465	17.5	26	10	.....	56.0
Sheboygan	603	20.8	53	12	15	88.0
Waukesha	560	28.6	42	11	17	75.0
Winnebago	626	20.4	41	18	6	65.6
Total	11,578	.....	956	243	256	82.5
City						
Ashland	302	26.3	25	10	6	83.0
Green Bay	891	28.8	125	37	27	140.0
Madison	832	21.6	41	11	13	49.2
Superior	922	23.3	76	24	20	82.5
Eau Claire	679	32.4	48	14	10	71.0
Fond du Lac	562	24.0	55	22	15	98.0
Kenosha	1,050	26.0	101	32	10	96.5
La Crosse	768	25.3	50	22	9	65.2
Manitowoc	419	23.8	42	15	13	100.0
Wausau	484	25.9	52	19	8	107.5
Marinette	295	21.7	23	6	2	78.2
Milwaukee	10,525	23.0	970	315	215	92.5
West Allis	291	21.1	29	10	8	99.0
Appleton	437	22.4	28	5	10	64.2
Stevens Point	323	28.4	24	7	3	74.2
Racine	1,433	24.5	101	29	17	70.8
Beloit	515	24.2	43	11	12	83.5
Janesville	373	20.4	28	14	13	75.2
Sheboygan	730	23.6	50	12	8	68.8
Waukesha	268	21.3	16	4	4	59.6
Oshkosh	676	20.3	49	27	10	72.5
Total	22,775	.....	1,976	696	433	86.7

TABLE No. 25—SHOWING INFANT MORTALITY IN RURAL COUNTIES FOR 1921

County	Total Live Births	Birth Rate Per 1,000 Population	Total Deaths Under 1 Year (Including Under 1 Month and Under 1 Day)	Total Deaths Over 1 Day and Under 1 Month	Total Deaths Under 1 Day	Death Rate 1st Year Per 1,000 Live Births
Adams	182	19.4	14	6	2	77.0
Barron	884	25.4	58	21	16	65.6
Bayfield	367	21.3	17	4	4	46.4
Buffalo	378	24.1	22	12	6	58.2
Burnett	238	21.8	16	5	4	67.3
Calumet	389	22.5	31	7	11	79.8
Chippewa	831	22.5	43	13	11	51.8
Clark	853	23.8	45	16	9	52.8
Columbia	596	19.5	28	8	11	47.0
Crawford	382	22.7	24	5	13	62.8
Dodge	1,118	22.4	67	24	22	60.0
Door	470	24.6	34	12	10	72.4
Dunn	668	24.6	41	14	17	61.4
Florence	72	19.9	5	1	1	69.5
Forest	275	27.1	24	6	7	87.3
Grant	917	23.5	42	15	15	45.8
Green	492	22.7	36	12	6	73.2
Green Lake	251	16.8	21	10	5	83.7
Iowa	494	23.0	44	20	13	89.0
Iron	228	21.8	19	7	5	83.3
Jackson	364	20.4	28	5	8	76.9
Jefferson	705	20.1	44	15	11	62.4
Juneau	433	22.5	27	10	8	62.3
Kewaunee	349	21.7	20	6	4	57.3
Lafayette	364	18.2	26	12	4	71.4
Langlade	725	33.0	47	14	18	64.9
Lincoln	507	23.9	40	13	14	79.0
Marquette	230	21.7	10	5	1	43.5
Monroe	710	24.8	56	11	19	78.9
Oconto	708	26.0	65	19	10	91.5
Oneida	359	25.2	31	5	10	86.4
Ozaukee	342	21.0	19	10	4	55.5
Pepin	162	21.7	11	4	5	68.0
Pierce	453	20.9	35	10	14	77.3
Polk	706	25.7	37	11	12	52.4
Price	479	25.2	33	16	6	68.9
Richland	537	27.0	36	7	15	67.0
Rusk	521	30.2	24	6	9	46.1
St. Croix	602	23.0	36	8	14	59.8
Sauk	651	20.0	37	13	9	56.8
Sawyer	215	25.5	14	6	5	69.8
Shawano	811	23.7	80	23	21	98.6
Taylor	496	26.7	33	15	9	66.6
Trempealeau	570	23.1	26	8	6	45.6
Vernon	737	25.0	46	21	16	62.4
Vilas	149	26.4	13	4	2	87.3
Walworth	499	17.0	35	6	15	70.2
Washburn	294	25.2	15	5	2	51.0
Washington	565	21.8	39	15	11	69.0
Waupaca	757	22.0	49	16	17	64.8
Waushara	348	20.8	15	5	2	43.1
Wood	1,015	29.0	71	17	25	70.0
Total	26,448	.....	1,729	559	514	64.8

TABLE NO. 26—SHOWING INFANT MORTALITY RATE FOR 1921 IN THE RURAL PORTIONS OF COUNTIES CONTAINING CITIES OF 10,000 POPULATION OR MORE

County	Total Live Births	Birth Rate Per 1,000 Population	Total Deaths Under 1 Year (Including Under 1 Month and Under 1 Day)	Total Deaths Over 1 Day and Under 1 Month	Total Deaths Under 1 Day	Death Rate 1st Year Per 1,000 Live Births
Ashland	280	20.8	22	6	6	78.6
Brown	655	20.6	57	19	20	87.0
Dane	1,050	20.6	58	13	26	55.2
Douglas	186	18.0	14	.....	9	75.4
Eau Claire	294	18.2	10	1	3	34.0
Fond du Lac	691	20.8	46	16	15	66.6
Kenosha	224	20.9	13	.....	15	58.0
La Crosse	271	19.4	23	.....	13	85.0
Manitowoc	805	23.4	63	16	19	78.3
Marathon	1,319	27.8	92	26	35	69.8
Marinette	511	23.8	41	11	7	81.2
Milwaukee	1,438	20.8	141	1	81	98.0
Outagamie	820	22.8	81	23	21	98.9
Portage	577	25.8	66	20	32	97.0
Racine	407	19.8	30	9	11	73.8
Rock	483	18.2	35	3	20	72.4
Sheboygan	607	20.9	30	3	15	49.5
Waukesha	657	21.7	43	19	8	65.5
Winnebago	670	21.7	41	11	6	61.2
Total	11,945	.....	906	197	362	75.8
City						
Ashland	318	28.1	28	17	5	88
Green Bay	967	36.0	90	30	11	92
Madison	908	22.9	42	17	14	46.2
Superior	941	23.8	73	24	18	77.5
Eau Claire	691	32.7	43	23	12	62.2
Fond du Lac	578	24.1	44	9	20	76
Kenosha	1,046	24.7	69	25	15	66
La Crosse	809	26.6	67	32	14	82.5
Manitowoc	503	27.8	43	20	11	86
Wausau	555	29.4	46	21	7	83
Marinette	282	20.7	21	6	5	74.5
Milwaukee	10,829	23.1	864	298	222	80.5
West Allis	398	27.5	27	11	8	68
Appleton	500	25.3	42	15	5	84
Stevens Point	355	30.5	23	.....	.....	65
Racine	1,355	22.3	103	34	19	76
Beloit	457	20.8	37	14	12	81
Janesville	430	23.0	26	8	6	60.5
Sheboygan	768	24.4	62	28	10	81
Waukesha	275	21.3	17	2	9	62
Oshkosh	805	24.3	71	16	35	88
Total	23,770	.....	1,838	650	458	77.3

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